APPENDIX A

Acronyms and Abbreviations

ACRONYMS

IGLD 85	International Great Lakes Datum of 1985
LWMD	Land and Water Management Division
M/D/Y	Month / Day / Year
MDEQ	Michigan Department of Environmental Quality
NAVD 88	North American Vertical Datum 1988
NGVD 29	National Geodetic Vertical Datum of 1929
NREPA	Natural Resources and Environmental Protection Act
OHWM	Ordinary High Water Mark
PCU	Permit Consolidation Unit
USACE	United States Army Corps of Engineers
U.S.C.	United States Code of Federal Regulations
WIP	Wetland Identification Program

ABBREVIATIONS

ac	acre
cu yd	cubic yards
ft	feet
sq ft	square feet

General Instructions For All Drawings

Required drawings:

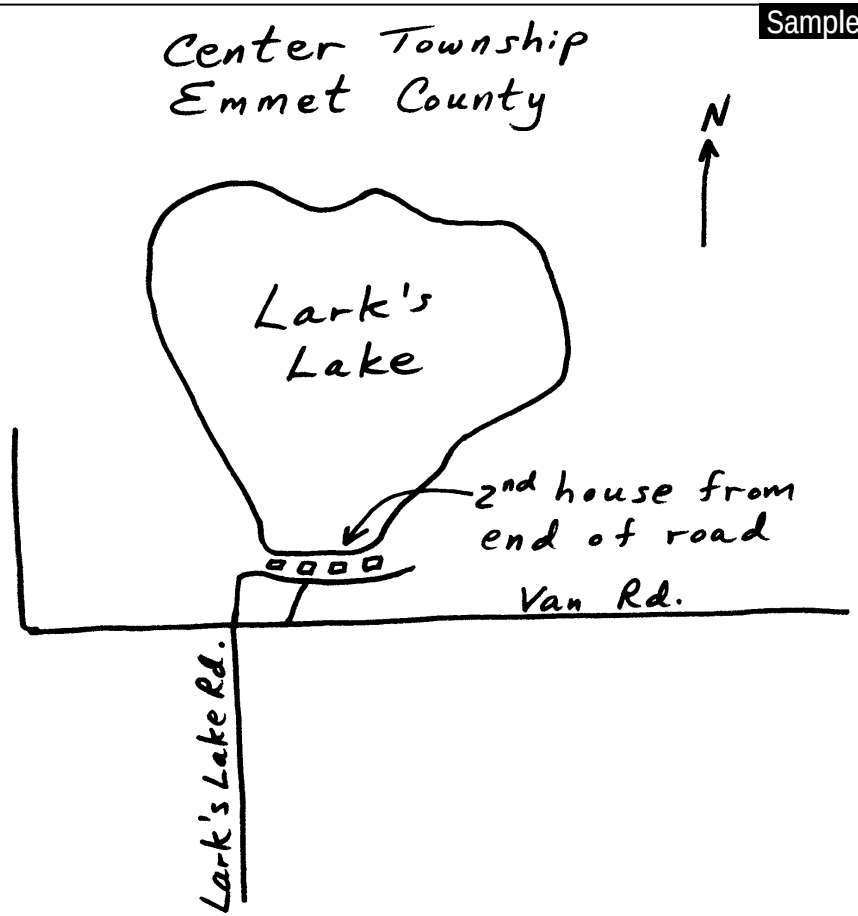
- ❑ **Site location map** that clearly identifies your project location. Draw a map, copy a plat map or a county map, or create a map using the Internet (see Sample Drawing 1).
- ❑ **Overall site plan** showing areas of proposed impacts, existing lakes, streams, wetlands, *floodplains,* and other water features. Include name of waterbodies, property boundaries and corners, easement boundaries, neighboring property owner information, and *soil erosion and sedimentation control measures*.
- ❑ ***Plan view*** and ***cross-section*** (elevation) drawings that are site-specific and adequate for detailed review. Show both existing and proposed conditions (see Sample Drawings 2 through 23).

All drawings should:

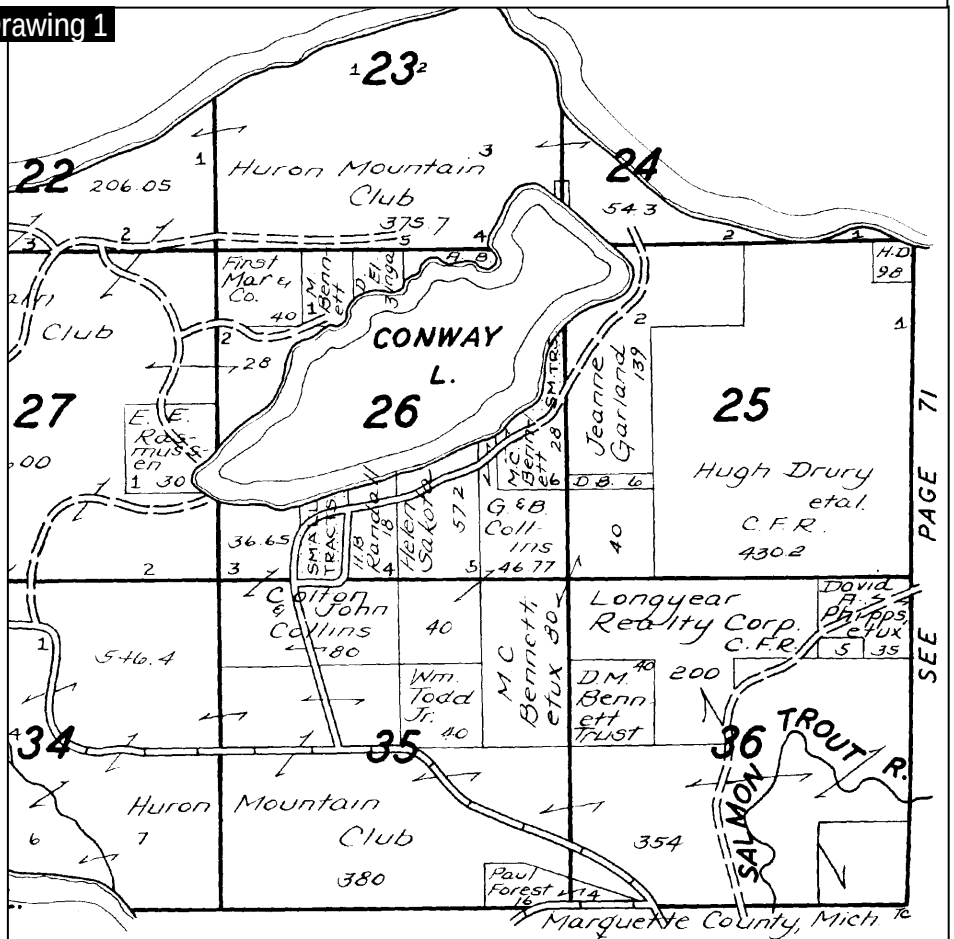
- ❑ Be legible and clearly labeled on standard weight paper of 8-1/2 x 11-inch size. If drawings are engineering plans larger than 8-1/2 x 11, submit a minimum of five copies.
- ❑ Title block on each drawing which includes: proposed activity; applicant's name; waterbody; city, village or township; county; drawing number and number in set (i.e., Drawing 1 of 4), and date prepared.
- ❑ Reference a datum (*NGVD 29* or *IGLD 85*) if the proposed project is on *Section 10 Waters*).
- ❑ Be drawn to scale with the scale identified on each drawing. Show vertical scale if different than horizontal scale on each drawing.
- ❑ All plan view drawings should include a north arrow.
- ❑ Label all existing and proposed relevant features and dimensions relative to those features, especially those that correspond to questions on the application form.
- ❑ Include soil erosion and sedimentation control measures.

NOTE: To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27.

Sample Drawing 1

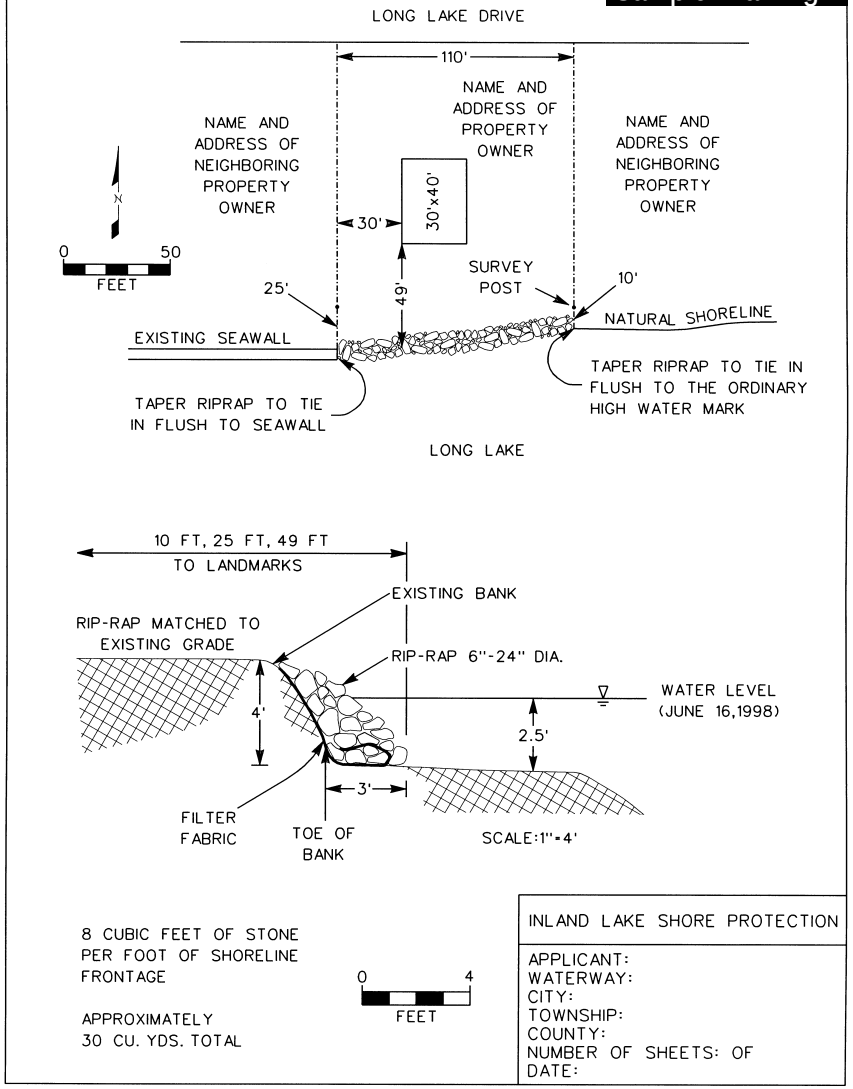


Site location map using a hand-drawn map that is clearly labeled



Site location map using a copy of a county plat book

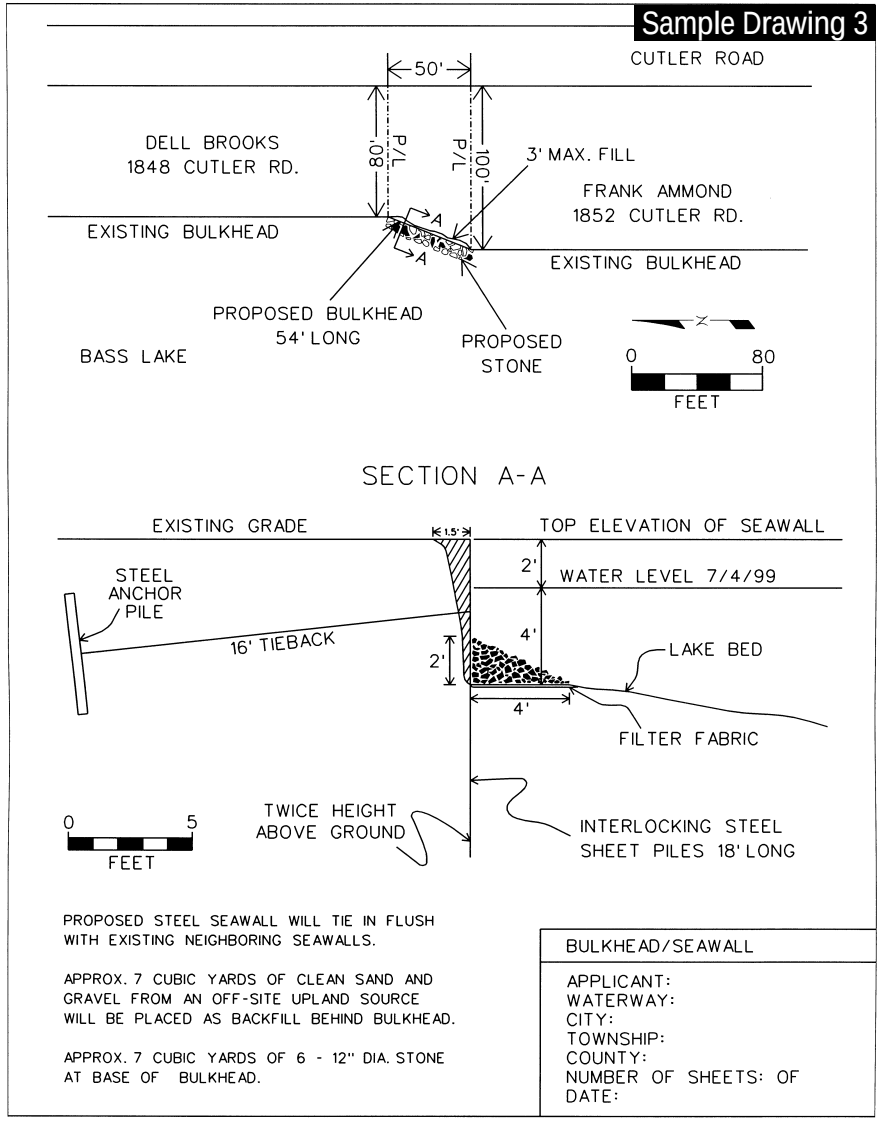
Sample Drawing 2



Complete Section 10D and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Name of waterbody, neighboring property owner information, and property boundaries and corners.
- ❑ Existing and proposed conditions along the *shoreline* at your project location.
- ❑ Existing conditions and/or structures along the *shoreline* for each adjacent parcel.
- ❑ Dimensions from fixed objects to property boundaries and the proposed shore protection.
- ❑ Length (ft), volume (cu yd) and type (i.e., field stone, angular rock, etc.) of *riprap*.
- ❑ Locations of *filter fabric* and *soil erosion and sedimentation control measures*.
- ❑ Observed water level and date of observation and datum (*NGVD 29* or *IGLD 85* on *Section 10 Waters*).
- ❑ Minimum and maximum distances landward and waterward of proposed shore protection to the existing *shoreline* or ordinary high water mark.

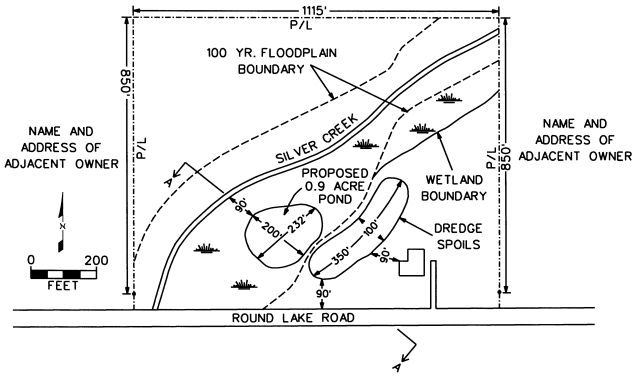
Sample Drawing 3



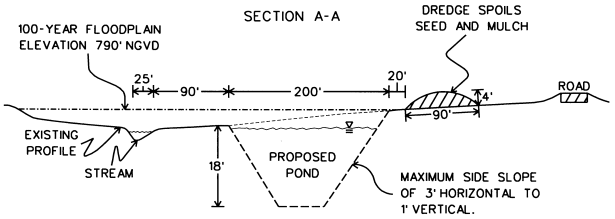
Complete Section 10D and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Name of waterbody, neighboring property owner information, and property boundaries and corners.
- ❑ Existing and proposed conditions along the *shoreline* at your project location.
- ❑ Existing conditions and/or structures along the *shoreline* for each adjacent parcel.
- ❑ Dimensions from fixed objects to property boundaries and the proposed shore protection.
- ❑ Length of *seawall/bulkhead* and return wall (ft). If *structure* will be tied into adjacent walls, show how.
- ❑ Locations of *filter fabric* and *soil erosion and sedimentation control measures.*
- ❑ Type of construction material (i.e., wood, steel concrete, vinyl, etc.).
- ❑ Observed water level and date of observation and datum (*NGVD 29* or *IGLD 85* on *Section 10 Waters*).
- ❑ Minimum and maximum distances landward and waterward of proposed shore protection to the existing *shoreline* or ordinary high water mark.

Sample Drawing 4



APPROXIMATELY 5000 CU. YD. WILL BE EXCAVATED AND THE DREDGE SPOILS WIL BE PLACED ON-SITE ABOVE THE 100 YR. FLOODPLAIN ELEVATION AND UPLAND OF REGULATED WETLANDS.



HORIZONTAL SCALE: 0 100 FEET

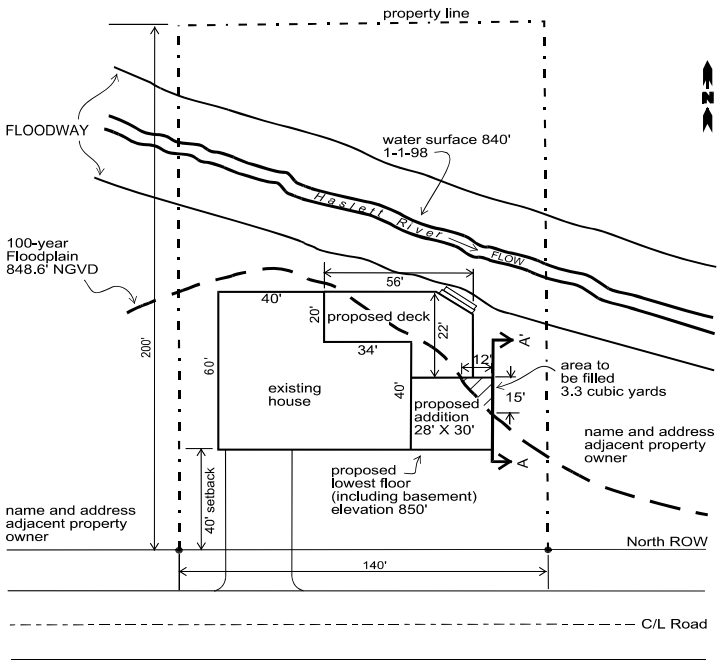
VERTICAL SCALE: 0 18 FEET

POND CONSTRUCTION
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: OF
DATE:

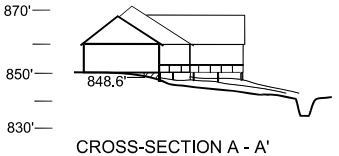
Complete Section 11 and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, and other water features.
- ❑ Waterbody names, property boundaries and corners, and neighboring property owner information. Please include property owner information for upstream and downstream adjacent parcels.
- ❑ Existing and proposed conditions in the area of proposed pond.
- ❑ Maximum depth, maximum and typical side *slopes* at edge of pond (vertical/horizontal), pond surface area, and dimensions and distances of proposed pond and spoils disposal area from fixed objects and property boundaries. Spoils should be placed above the 100-year floodplain elevation and upland of regulated wetlands. If off-site disposal is planned, please provide a detailed description of the location.
- ❑ *Soil erosion and sedimentation control measures.*
- ❑ Water levels and dates of observation in nearby surface water and at proposed pond location.
- ❑ Datum (*NGVD 29, IGLD 85* or local) and dredge volume (cu yd).
- ❑ If pond will have a surface water outlet show on plan and *cross-section* drawings.

Sample Drawing 5



0 40'
Scale



CROSS-SECTION A - A'

*Elevations may be referenced to a temporary benchmark in those areas where USGS Benchmarks are not already available.

Cubic yards of fill:

$\frac{\text{area (ft}^2\text{) x average depth (ft)}}{27 \text{ ft}^3 / \text{cu yd}}$ = cu yd

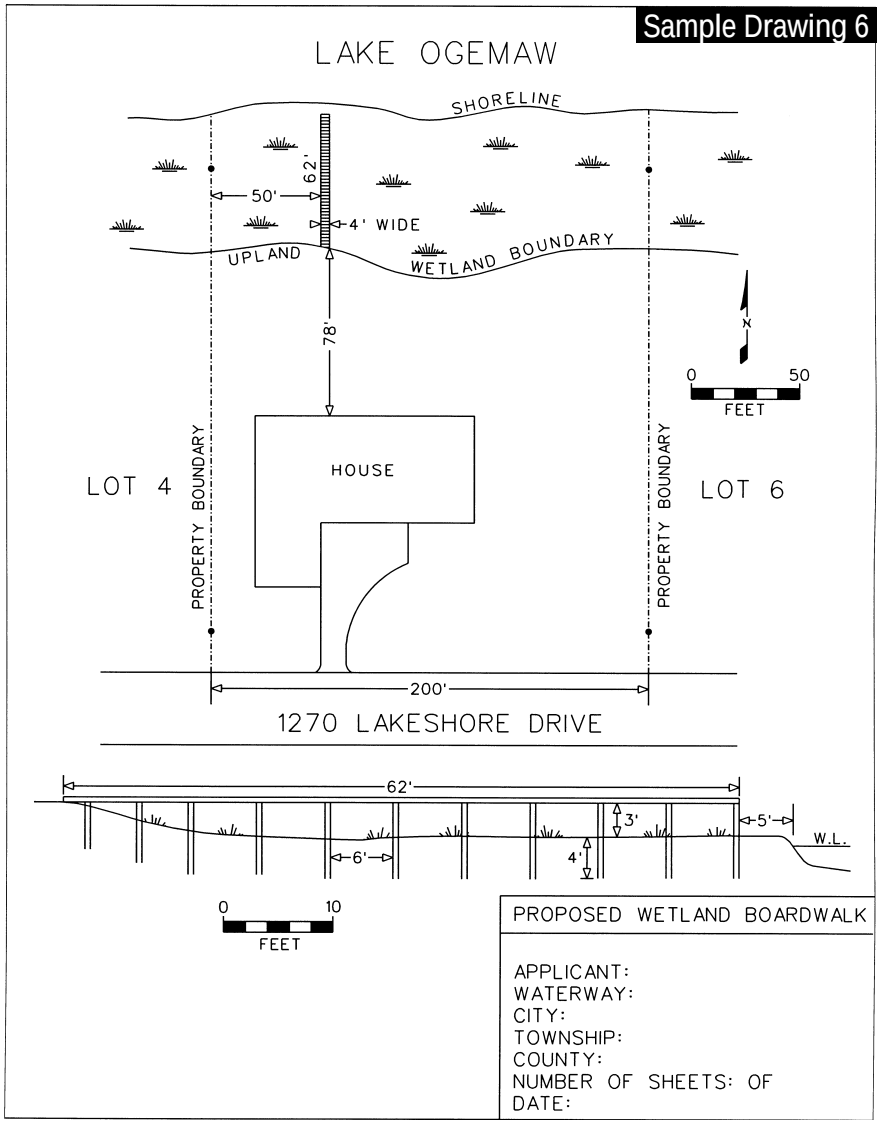
$\frac{(15 \text{ ft x } 12 \text{ ft})/2 \text{ x } (1 \text{ ft})}{27 \text{ ft}^3 / \text{cu yd}}$ = 3.3 cu yd

PROPOSED FLOODPLAIN FILL
APPLICANT:
WATERWAY:
CITY/TOWNSHIP: SECTION: ___
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

Complete Section 13 and Sections 10A, 10B, 10C, and 12 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, and other water features.
- ❑ Waterbody names, property boundaries and corners, neighboring property owner information, and *soil erosion and sedimentation control measures*.
- ❑ Datum used (*NGVD 29 or IGLD 85*).
- ❑ 100-year *floodplain* elevation (if known). Proposed basement floor and finished first-floor elevations (ft).
- ❑ Description of reference point and highest known water elevation (ft) above or below reference point and date of observation (M/D/Y).
- ❑ Existing and proposed building dimensions and minimum and maximum distances of proposed cut and or fill from waterbodies, wetlands, and *floodplain* boundaries (ft).
- ❑ Proposed and existing contours on a site development plan that show compensating cut for proposed fill in the floodplain.
- ❑ Excavation and/or fill dimension (length, width, depth) and volumes (cu yd).
- ❑ Show location of excavated materials. If on site, please show on plans.

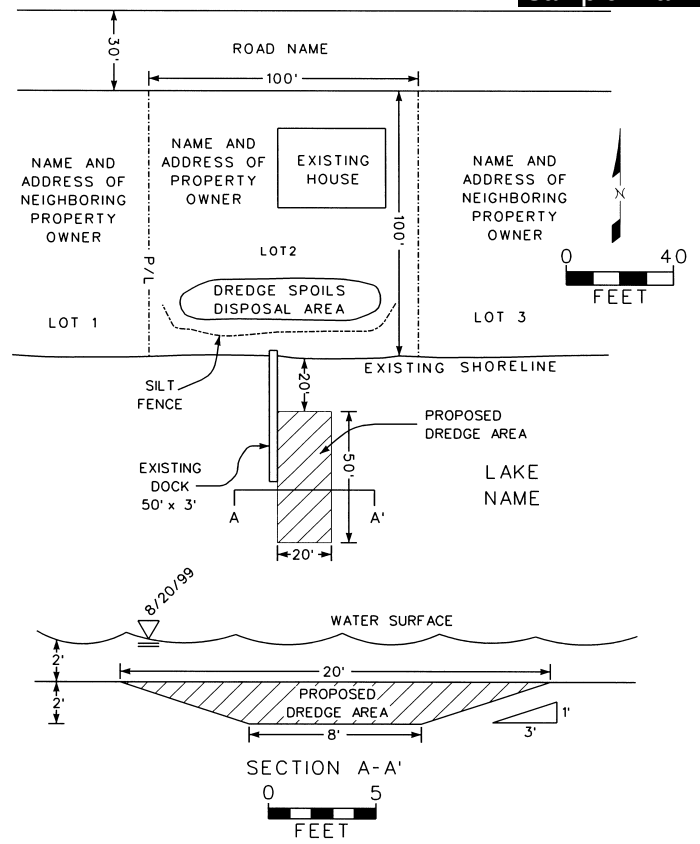
Sample Drawing 6



Complete Sections 10I and 12 and Sections 10A, 10B, 13, and 21 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ The boardwalk or deck dimensions in feet (height, width, and length).
- ❑ In cross-sectional view show the maximum and minimum height of boardwalk above existing ground and the supporting system (i.e. fill or pilings).
- ❑ Distance from end of boardwalk to *shoreline* or ordinary high water mark.
- ❑ The existing and proposed building dimensions and minimum and maximum distances of proposed cut and or fill from waterbodies, wetlands, and floodplain boundaries (ft).
- ❑ The observed water elevation and date of observation (M/D/Y).
- ❑ Datum (*NGVD 29* or *IGLD 85* on *Section 10 Waters*).
- ❑ *Soil erosion and sedimentation control measures*.

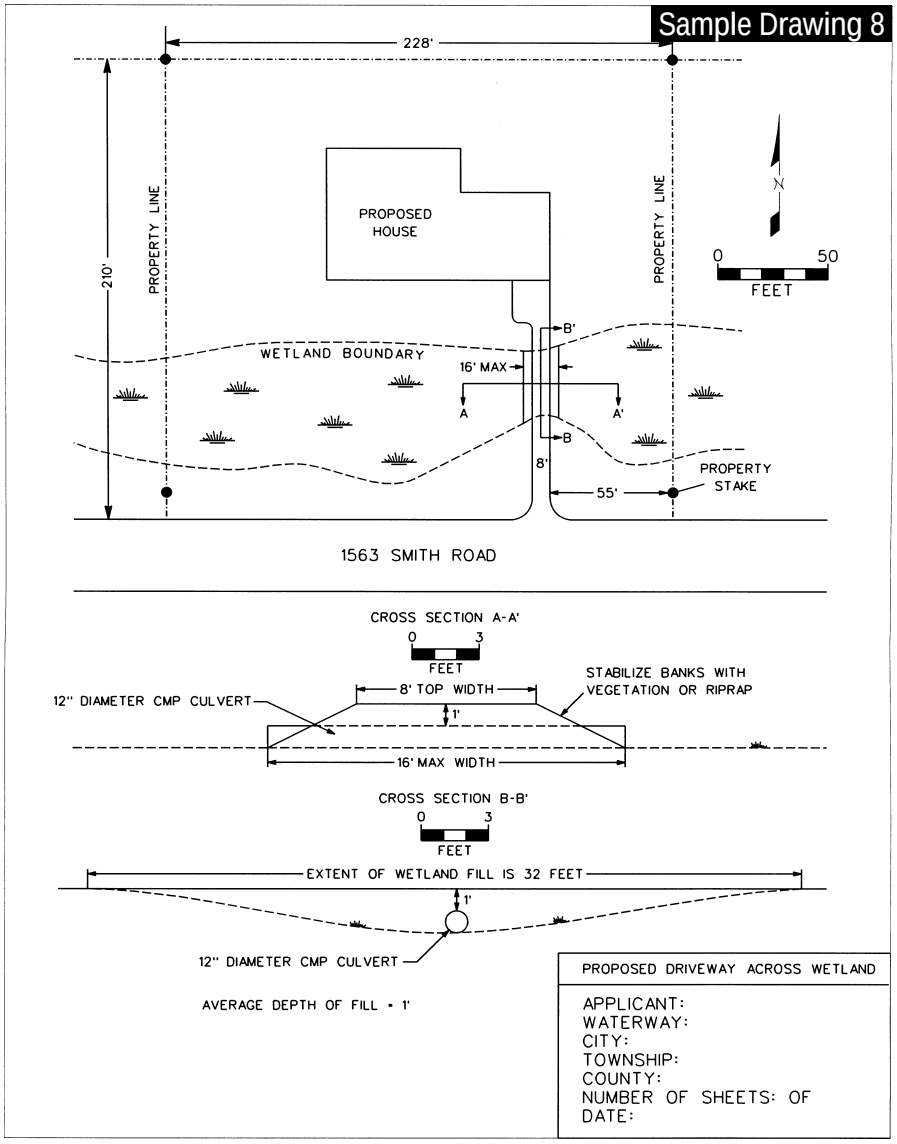
Sample Drawing 7



Complete Sections 10B and Sections 10A, 12, 13, and 21 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ The dredge spoils disposal area location in an upland area above the 100-year floodplain. If spoils will be disposed of off-site, attach a detailed location. Sediment sampling may be required.
- ❑ The location and dimensions of existing or proposed *docks* or *piers*.
- ❑ The maximum and average dredge dimensions (ft) in both plan and cross-section views. Calculate dredge volume (cu yd) by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- ❑ The observed water elevation and date of observation (M/D/Y).
- ❑ Datum (*NGVD 29* or *IGLD 85* on *Section 10 Waters*).
- ❑ *Soil erosion and sedimentation control measures*.

Sample Drawing 8



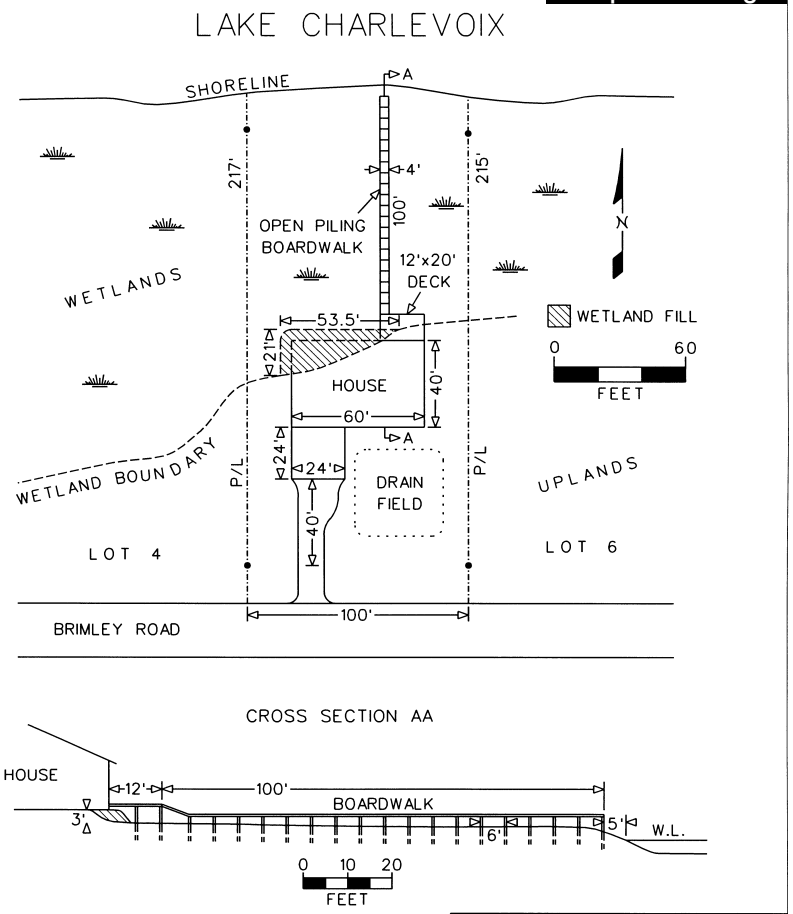
PROPOSED DRIVEWAY ACROSS WETLAND

APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: OF
DATE:

Complete Sections 10A, 10B, 10C, 12, 13, and 14 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ An overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ Choose the crossing location to provide for minimum impact to the wetland.
- ❑ The length, diameter, and type of culvert that is proposed.
- ❑ The volume of fill in cubic yards by multiplying average (depth) x (width) x (length) and dividing by 27.
- ❑ Method of bank stabilization at the culvert ends.
- ❑ The dimensions for maximum depth and maximum extent of fill. Include dimensions from fixed objects and property boundaries to wetland fill area.
- ❑ *Soil erosion and sedimentation control measures*, if within 500 feet of a lake or stream.

Sample Drawing 9



APPLICATION TO PLACE APPROXIMATELY 60 CUBIC YARDS OF FILL TO A MAXIMUM DEPTH OF 3'. FILL IS TO BE PLACED NO FARTHER THAN 5' FROM HOUSE FOUNDATION.

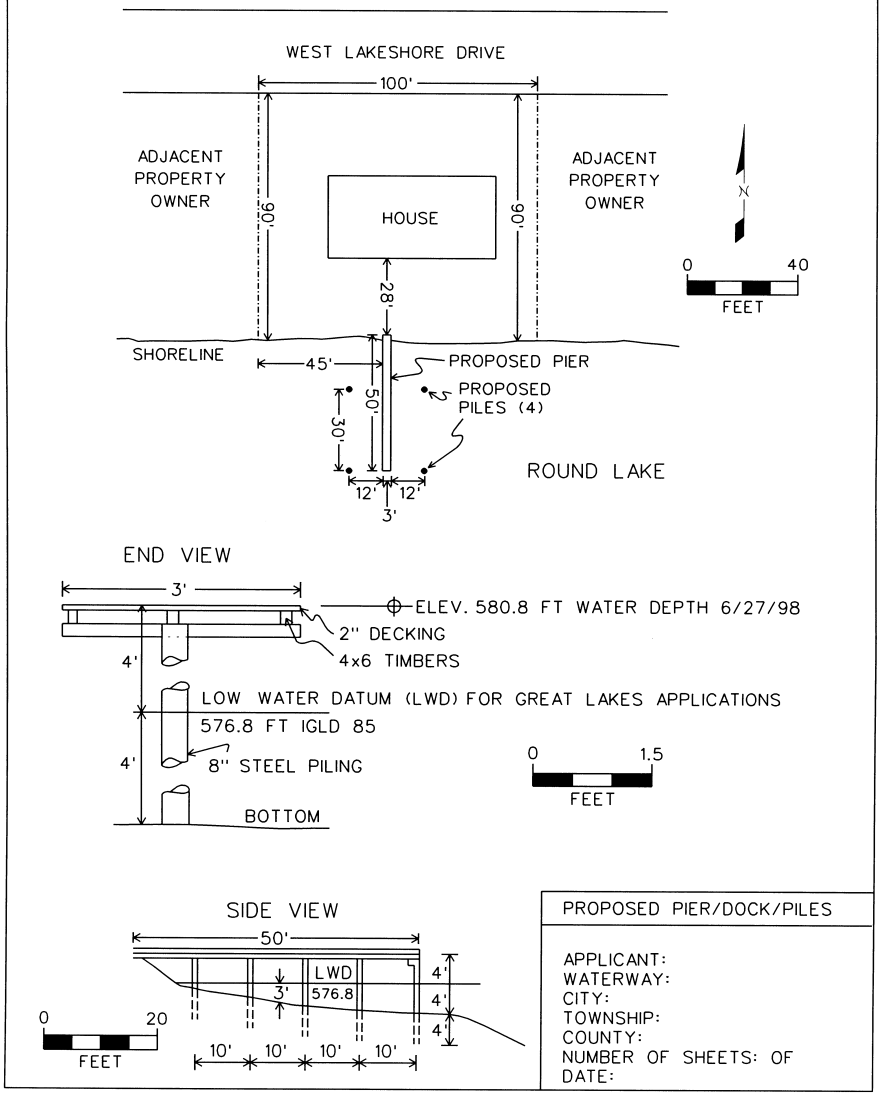
PROPOSED RESIDENTIAL WETLAND FILL AND BOARDWALK CONSTRUCTION

APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: __ OF __
DATE:

Complete Sections 10A, 10B, 10C, 12, 13, and 14 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ An overall site plan showing existing lakes, streams, wetlands, *floodplains* and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ Site location plan that provides for minimum impact to the wetland.
- ❑ The dimensions for maximum depth and maximum extent of fill. Include dimensions from fixed objects and property boundaries to wetland fill area.
- ❑ The fill volume (cu yd) calculated by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- ❑ *Soil erosion and sedimentation control measures*.
- ❑ Observed water elevation, date of observation(M/D/Y).
- ❑ Datum (*IGLD 85* or NGVD 29 on *Section 10 Waters*).

Sample Drawing 10

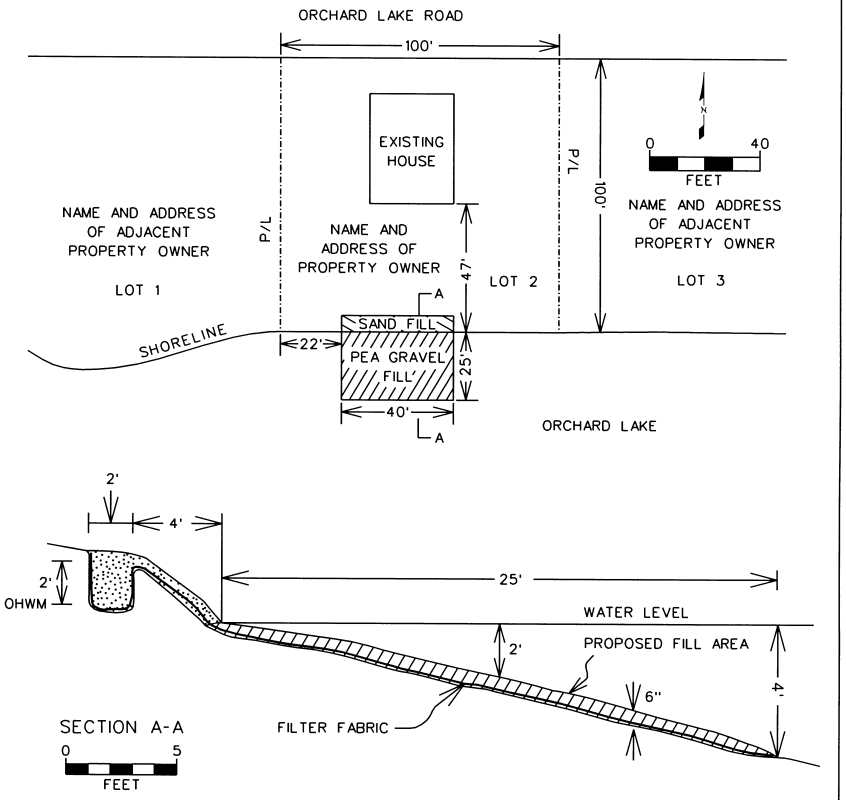


PROPOSED PIER/DOCK/PILES
APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEETS: OF DATE:

Complete Sections 10A, 10B, 12, 13, and 21 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Name of waterbody, neighboring property owner information, property boundaries, and distances to adjacent property lines from proposed *dock*.
- ❑ Observed water elevation and date of observation (M/D/Y).
- ❑ Datum used (*IGLD 85* or *NGVD 29 on Section 10 Waters*).
- ❑ Dimensions from fixed objects to property boundaries and the proposed *pier, dock,* or *piles*.
- ❑ Existing conditions along the *shoreline* for each adjacent parcel.
- ❑ Dimension of existing *structures* for each adjacent parcel
- ❑ Material used for construction of *pier*, *dock*, and or *piles*.

Sample Drawing 11



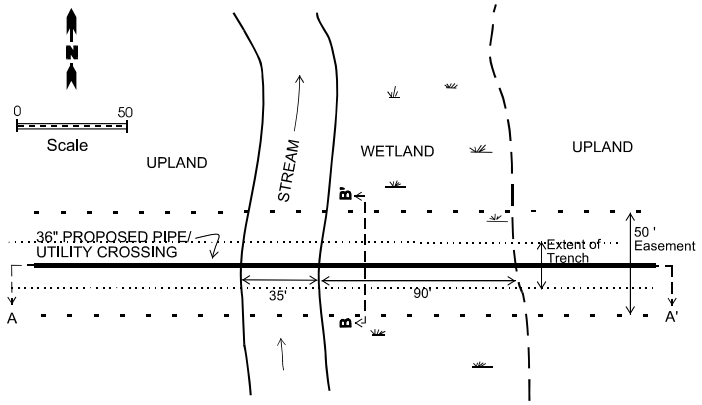
APPLICATION TO PLACE APPROXIMATELY 12 CUBIC YARDS OF CLEAN SAND OR PRE-WASHED PEA GRAVELTO A DEPTH OF 6" WITHIN A 40' x 25' AREA. SAND OR PEA GRAVEL TO BE TRUCKED IN FROM AN UPLAND SOURCE AND PLACED ON FILTER FABRIC.

PROPOSED BEACH SANDING
APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEETS: OF DATE:

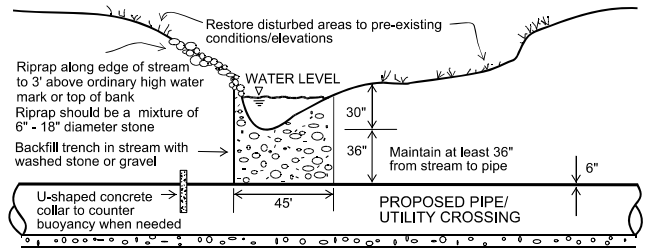
Complete Sections 10A, 10B, 10C, and 12 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ Dimensions of an existing or proposed house, *dock*, or other structures from the proposed sanding area and property boundaries.
- ❑ The maximum and average fill dimensions (ft) in both plan and *cross-section* views. Calculate fill volume (cu yd) by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- ❑ The observed water level, date of observation (M/D/Y) and datum, if used (*NGVD 29* or local).
- ❑ The extent of *filter fabric*, if used, and how the *filter fabric* will be grounded.
- ❑ *Soil erosion and sedimentation control measures*.
- ❑ Source of clean sand or pre-washed gravel.

Sample Drawing 12



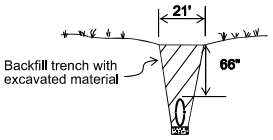
PLAN DRAWING



CROSS SECTION A-A'

6" Bed of sand or gravel

Cross Section Scale
0 50'
Horizontal
0 6'
Vertical



CROSS SECTION B-B'

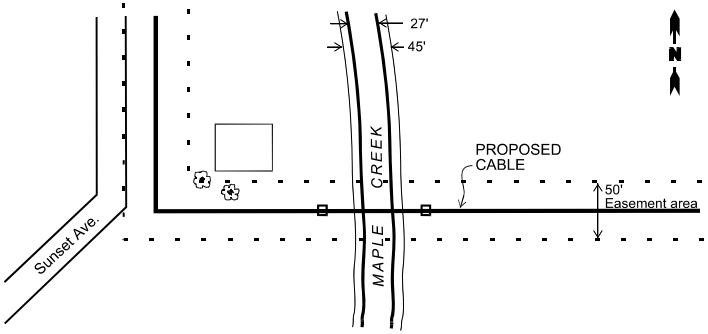
PROPOSED PIPE/UTILITY CROSSING
IN A TRENCH

APPLICANT:
WATERWAY:
CITY/TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

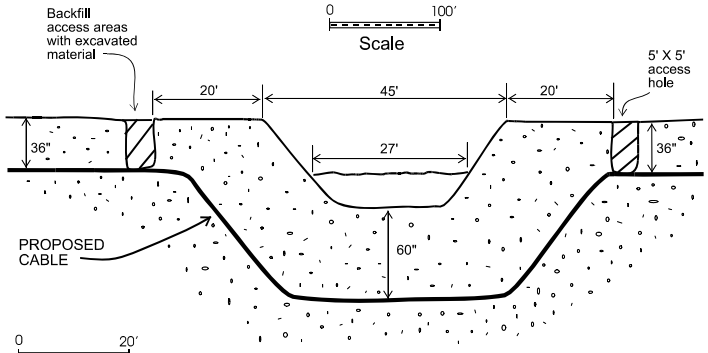
Complete Section 18 and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.
Provide *plan view* and cross-section site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, easement boundaries, neighboring property owner information, *soil erosion and sedimentation control measures* and datum used (NGVD 29 or local).
- ❑ Location and dimensions (ft) of proposed excavation in both *plan* and *cross-section* views. Calculate excavation volume (cu yd) by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- ❑ Location of disposal area in upland above the 100-year *floodplain.* If spoils will be disposed of off-site attach a detailed location. If temporary sidecasting, show location and dimensions.
- ❑ Proposed backfill material and source.
- ❑ Proposed installation method (i.e., *flume,* plow, open trench).
- ❑ Pipe diameter, length, and distance below streambed for each crossing.
- ❑ Purpose of crossing (i.e. sanitary sewer, storm sewer, watermain, cable, oil/gas pipeline, etc.)

Sample Drawing 13



PLAN VIEW



TYPICAL CROSS SECTION

0 20'
Horizontal Scale
0 6'
Vertical Scale

PROPOSED DIRECTIONAL BORE
STREAM CROSSING

APPLICANT:
WATERWAY:
CITY/TOWNSHIP: SECTION: ___
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

Complete Section 18 and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

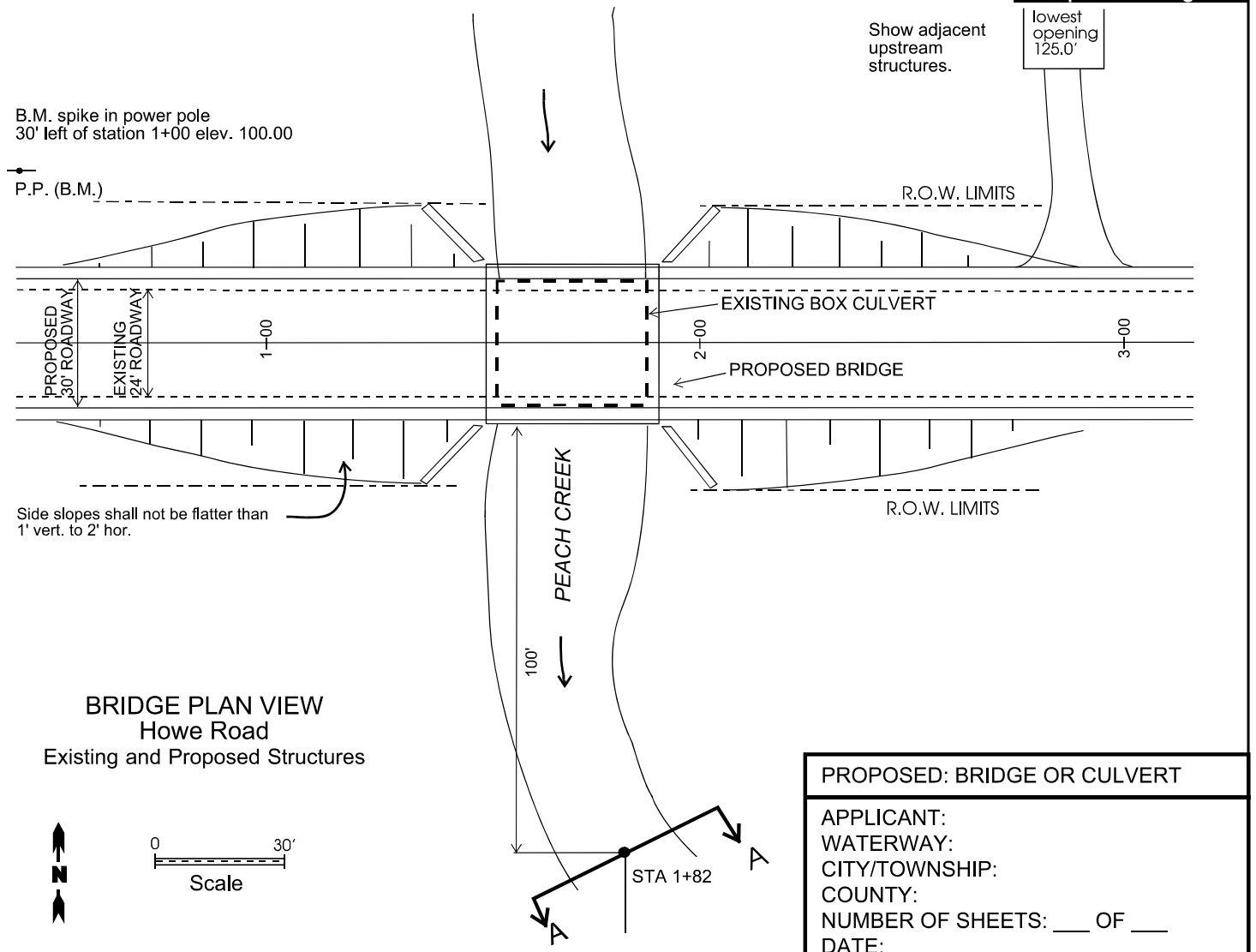
- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, easement boundaries, neighboring property owner information, and *soil erosion and sedimentation control measures*.
- ❑ Excavation dimensions (ft) for drilling or boring inlet and outlet points in both *plan* and *cross-section* views. Calculate excavation volume (cu yd) by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- ❑ Proposed construction method (i.e., jack and bore or directional drill).
- ❑ Pipe diameter, length, and distance below streambed for each crossing.
- ❑ Purpose of crossing (i.e. sanitary sewer, storm sewer, watermain, cable, oil/gas pipeline, etc.)

Proposed Bridges and Culverts:

Complete Section 14 and Sections 10A, 10B, 10C, 12, 13, and 15 if applicable to your project.

- ❑ Provide an overall site plan showing existing lakes, streams, wetlands, and other water features. Include name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ Provide detailed site-specific drawings of existing and proposed *Plan View* (Sample Drawing 14A), Elevation View (Sample Drawing 14B), Stream and *Floodplain Cross-Sections* (Sample Drawing 14C), and Stream Profile (Sample Drawing 14D) adequate for detailed review.
- ❑ If your project includes *floodplain* fill complete Section 13 and include a site-specific drawing (See Sample Drawing 5).

Sample Drawing 14A



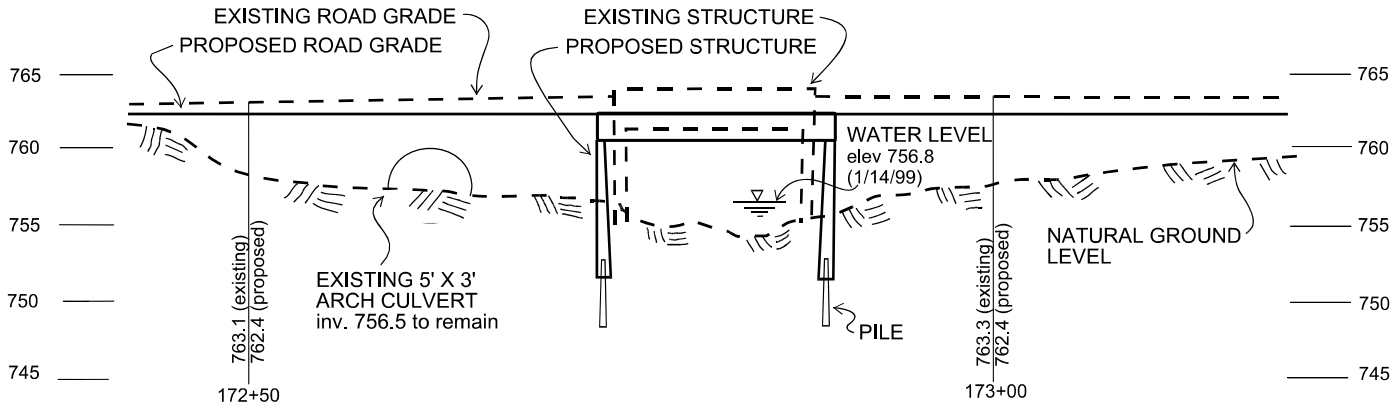
BRIDGE PLAN VIEW
Howe Road
Existing and Proposed Structures

PROPOSED: BRIDGE OR CULVERT
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

Bridge or Culvert Plan View

- ❑ Existing and proposed *structures* and approaches.
- ❑ Property boundaries and or right-of-ways (ROW).
- ❑ Description of reference point and datum used (NGVD 29, IGLD 85 or local).
- ❑ Location of *cross-section* or elevation views.
- ❑ *Soil erosion and sedimentation control measures*.

Sample Drawing 14B



BRIDGE ELEVATION VIEW
Existing and Proposed Structures

0 10'
Scale

Elevations in Feet

PROPOSED: BRIDGE OR CULVERT
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

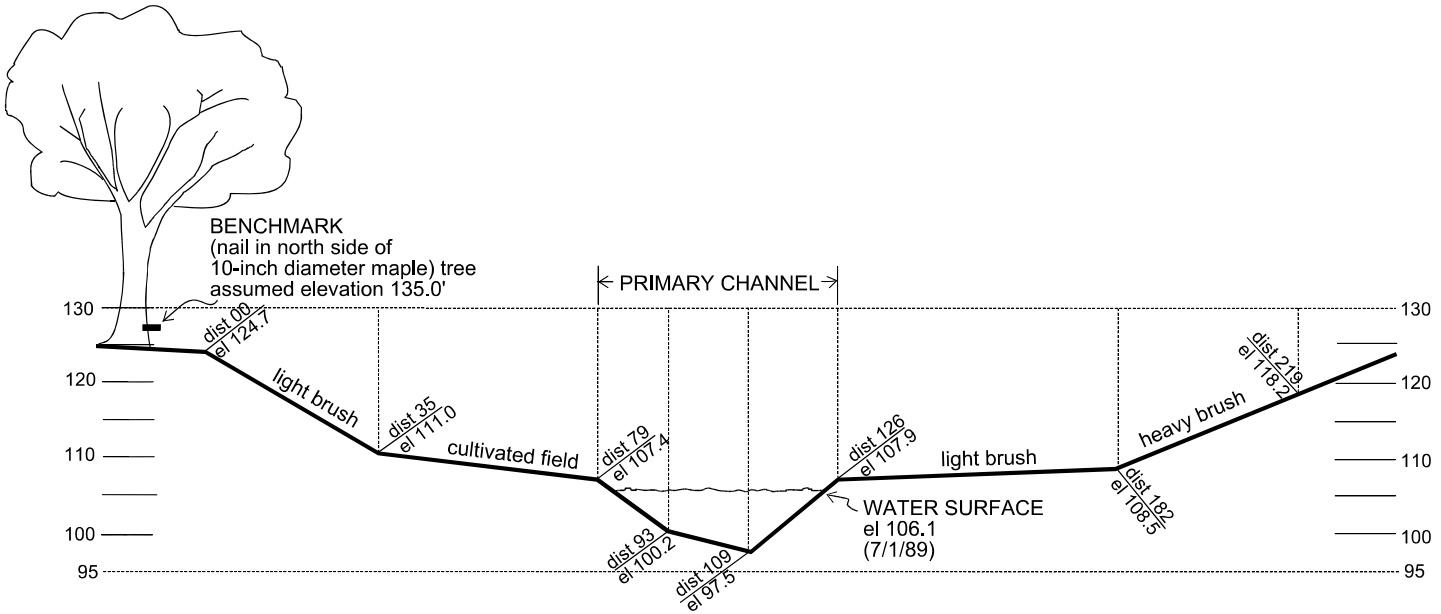
Bridge or Culvert Elevation View

- ❑ All proposed projects need to provide the channel dimensions (bank elevations, top width, bottom width, if channel bottom is horizontal).
- ❑ Observed and highest known water elevations (ft) and dates of observations (M/D/Y).
- ❑ *100-year floodplain* elevation (if known).
- ❑ Basement floor and finished first-floor elevations (ft) of nearby homes and buildings.
- ❑ Elevation *of ordinary high water mark* (OHWM).

Existing and proposed:

- ❑ *Structure* elevations.
- ❑ Road grade and elevation of low points in road.
- ❑ Distance from low point of road to mid-point of *structures.*
- ❑ Upstream and downstream elevations (ft) of culvert crown or bottom of bridge beam.

Sample Drawing 14C



CROSS-SECTION A - A
(Looking Downstream)

Cross-section downstream of proposed replacement structure
typical to the watercourse involved
and taken perpendicular to flood flows

Scale

0 20'
vertical

0 30'
horizontal

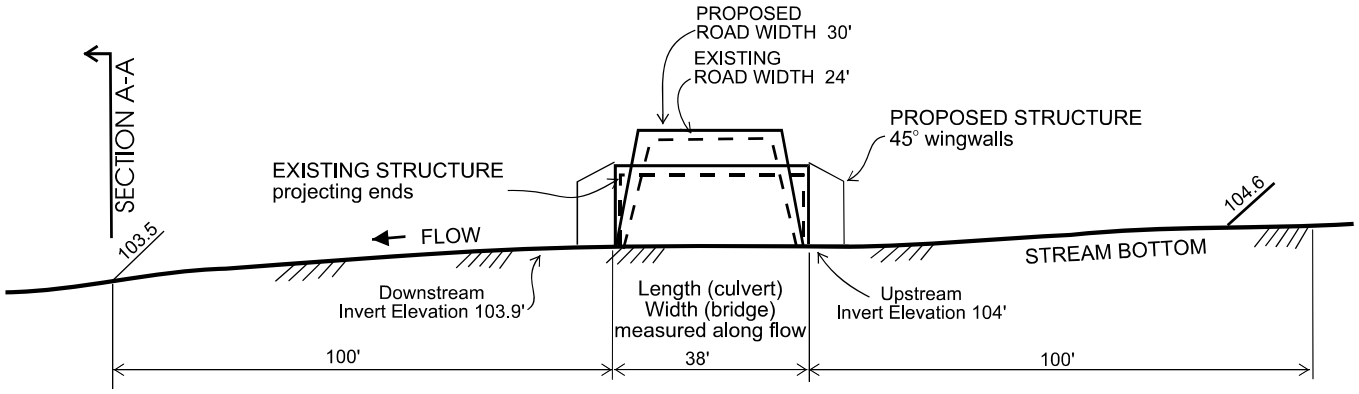
Elevations in Feet
el = grade point elevation in reference to the assumed benchmark

EXISTING & PROPOSED CROSS-SECTION
APPLICANT:
WATERWAY:
CITY/TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

Stream and *Floodplain Cross-Section* View

- ❑ All proposed projects need to provide the channel dimensions (bank elevations, top width, bottom width, if channel bottom is horizontal).
- ❑ Description of reference point and datum used (NGVD 29,IGLD 85, or local).
- ❑ Highest known and observed water elevations (ft) and dates of observations (M/D/Y).
- ❑ *100-year floodplain* elevation (if known).
- ❑ Descriptions of overbank vegetative cover within the *floodplain*.
- ❑ Elevation of *ordinary high water mark* (OHWM).
- ❑ If upstream channel and overbank dimensions and/or vegetative cover differ significantly from the downstream conditions also

Sample Drawing 14D



STREAM PROFILE VIEW
Existing and Proposed Structure,
Invert Elevations and End Treatment

Scale
0 20′
vertical
0 30′
horizontal

PROPOSED: BRIDGE OR CULVERT
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

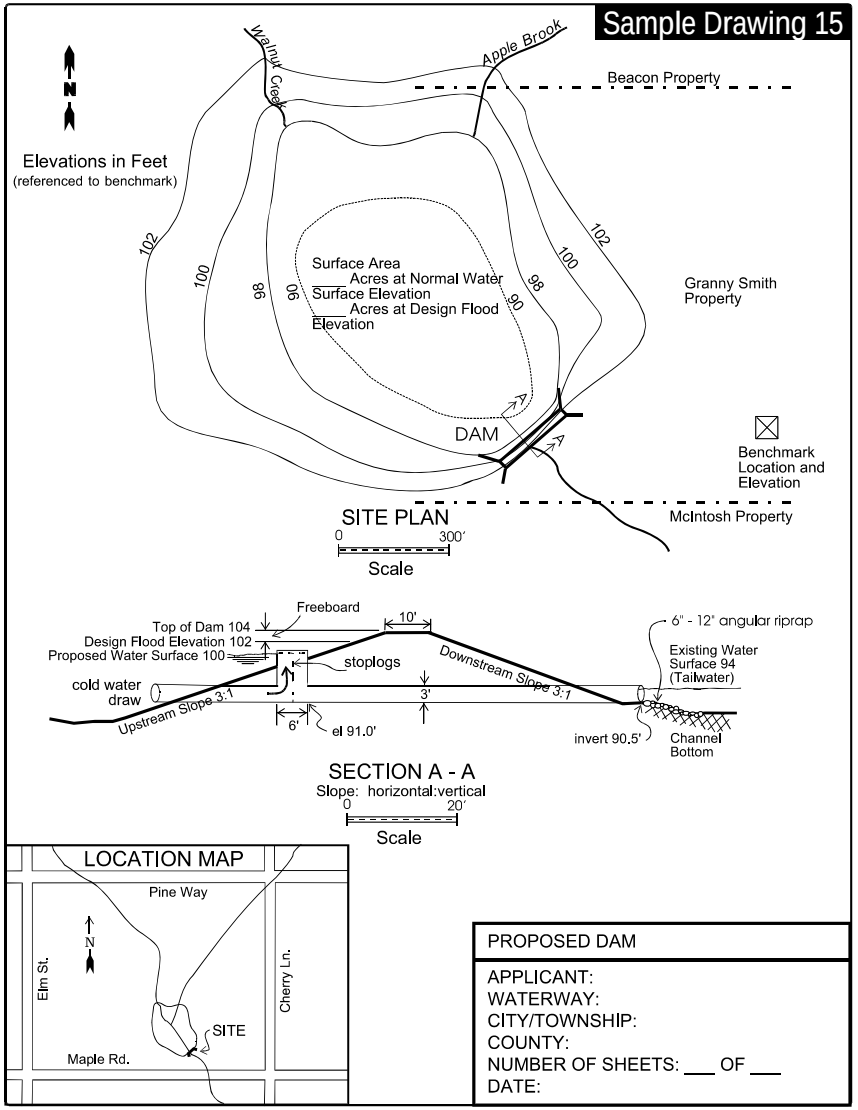
Stream Profile View

- ❑ Datum used (NGVD 29, IGLD 85, or local).
- ❑ Location of *cross-sections*.

Show existing and proposed:

- ❑ Road width and culvert length or bridge width (ft).
- ❑ Upstream and downstream invert elevations (ft)
- ❑ *100-year floodplain* profile (if known).

Sample Drawing 15



PROPOSED DAM
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

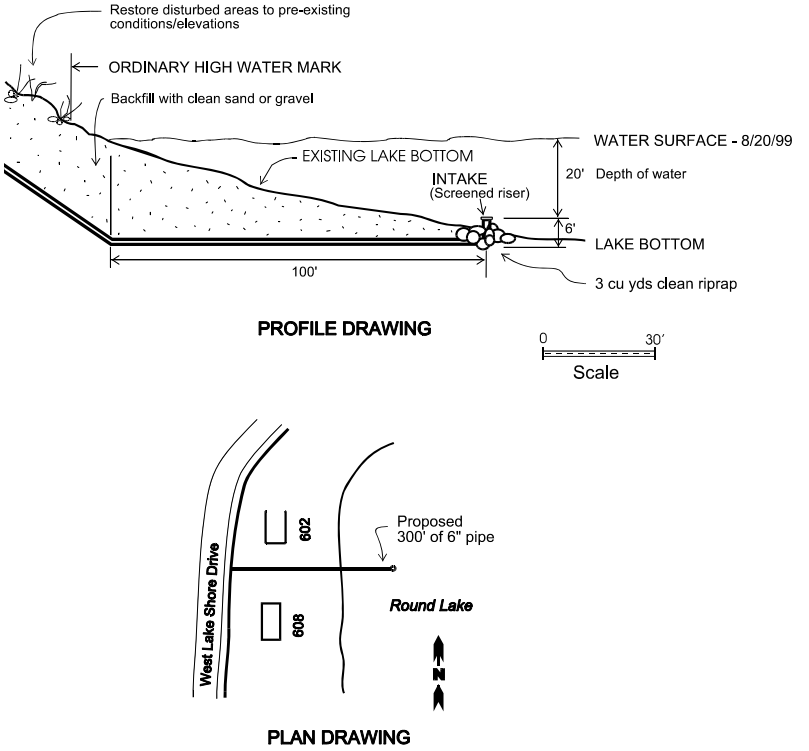
Complete Section 17 and Sections 10A, 10B, 10C, 11, 12, 14, and 16 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains,* and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ Highest known and observed water elevations (ft) and dates of observations (M/D/Y).
- ❑ Datum used (IGLD 85, NGVD 29, or local) and a description of the reference point or benchmark..
- ❑ Elevation of low point in top of embankment excluding spillways.
- ❑ *Soil erosion and sedimentation control measures*.

For a new dam include:

- ❑ Embankment top elevation and streambed elevation at downstream embankment toe.
- ❑ Structural height (embankment top elevation minus streambed elevation at downstream toe).
- ❑ Embankment length, top width, bottom width, and upstream and downstream *slopes* (vert./horiz.).
- ❑ Proposed normal pool and design flood elevations.

Sample Drawing 16

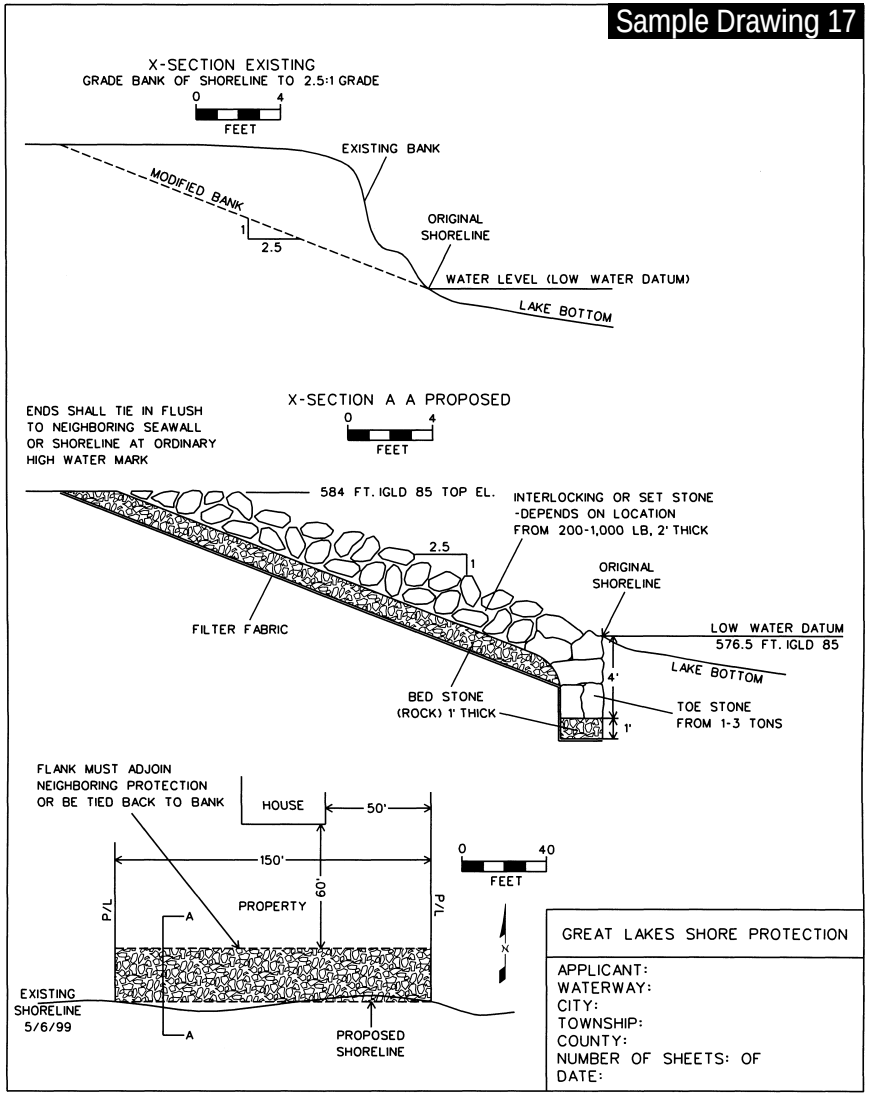


PROPOSED: WATER INTAKE
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

Complete Section 10J and Sections 10A, 10B, 10C, 12, 13, and 16 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, floodplains and other water features.
- ❑ Name of waterbodies, property boundaries, easement boundaries, neighboring property owner information, and *soil erosion and sedimentation control measures.*
- ❑ Highest known and observed water elevations (ft) and dates of observations (M/D/Y).
- ❑ Datum used (IGLD 85, NGVD 29, or local) and a description of the reference point or benchmark.
- ❑ Detailed dimensions (length, width, depth, diameter, etc.) of headwall, end section, and/or pipe.
- ❑ Pipe invert elevation.
- ❑ Number of pipes and pipe diameters and invert elevations.
- ❑ Dimensions from fixed objects to property boundaries and the proposed water intake.

Sample Drawing 17

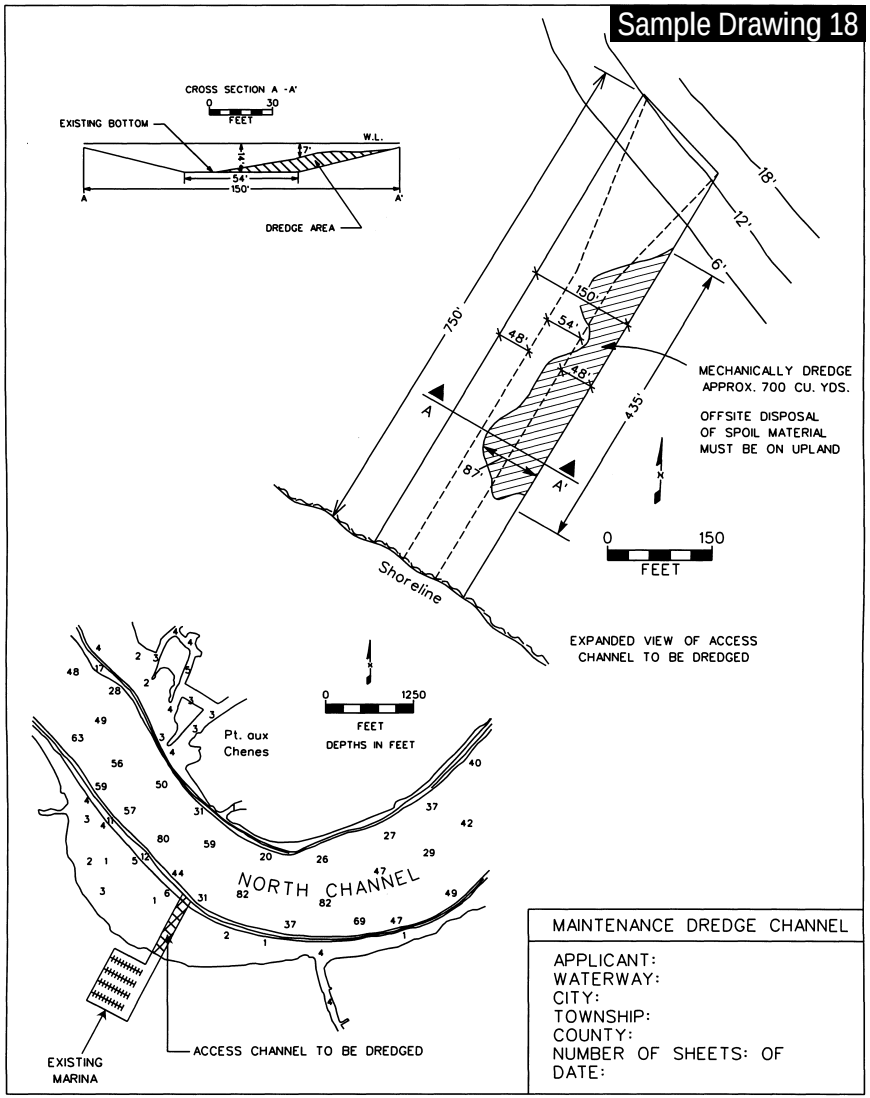


Complete Section 10D and Sections 10A, 10B, 10C, 12, 20, and 21 if applicable to your project.

Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Existing and proposed conditions along the shoreline at your project location.
- ❑ Existing conditions and/or structures along the *shoreline* for each adjacent parcel.
- ❑ Length of proposed shore protection. If shore protection is a *seawall* or *bulkhead*, please provide the return wall length (ft).
- ❑ Details of how *structure* will be tied into existing walls or tied back to bank.
- ❑ Location of filter fabric on *cross-section*.
- ❑ Horizontal and vertical dimensions from fixed objects to property boundaries and the proposed shore protection.
- ❑ Name of waterbody, neighboring property owner information, and property boundaries.
- ❑ *Soil erosion and sedimentation control measures*.
- ❑ Observed water elevation, date of observation, and datum (IGLD 85 or NGVD 29 on Section 10 Waters).

Sample Drawing 18

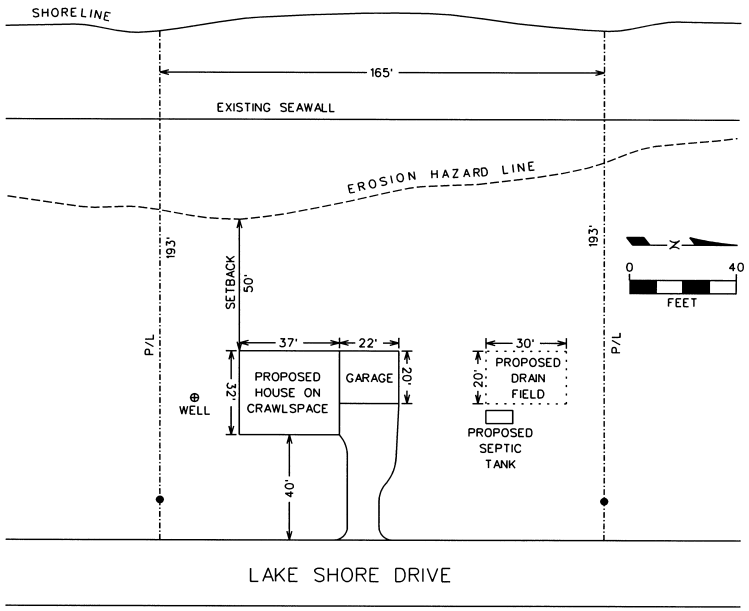


Complete Sections 10B and Sections 10A, 12, and 21 if applicable to your project.

Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ The dredge spoils disposal area location in an upland area above the *100-year floodplain*. If spoils will be disposed of off-site, attach a detailed location. Sediment testing may be required.
- ❑ The location and dimensions of existing or proposed *docks* or *piers*.
- ❑ Show maximum and average dredge dimensions (ft) in both plan and cross-section views. Calculate dredge volume in cubic yards by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- ❑ Observed water elevation, date of observation, and datum (IGLD 85 or NGVD 29 on Section 10 Waters).
- ❑ *Soil erosion and sedimentation control measures.*

Sample Drawing 19



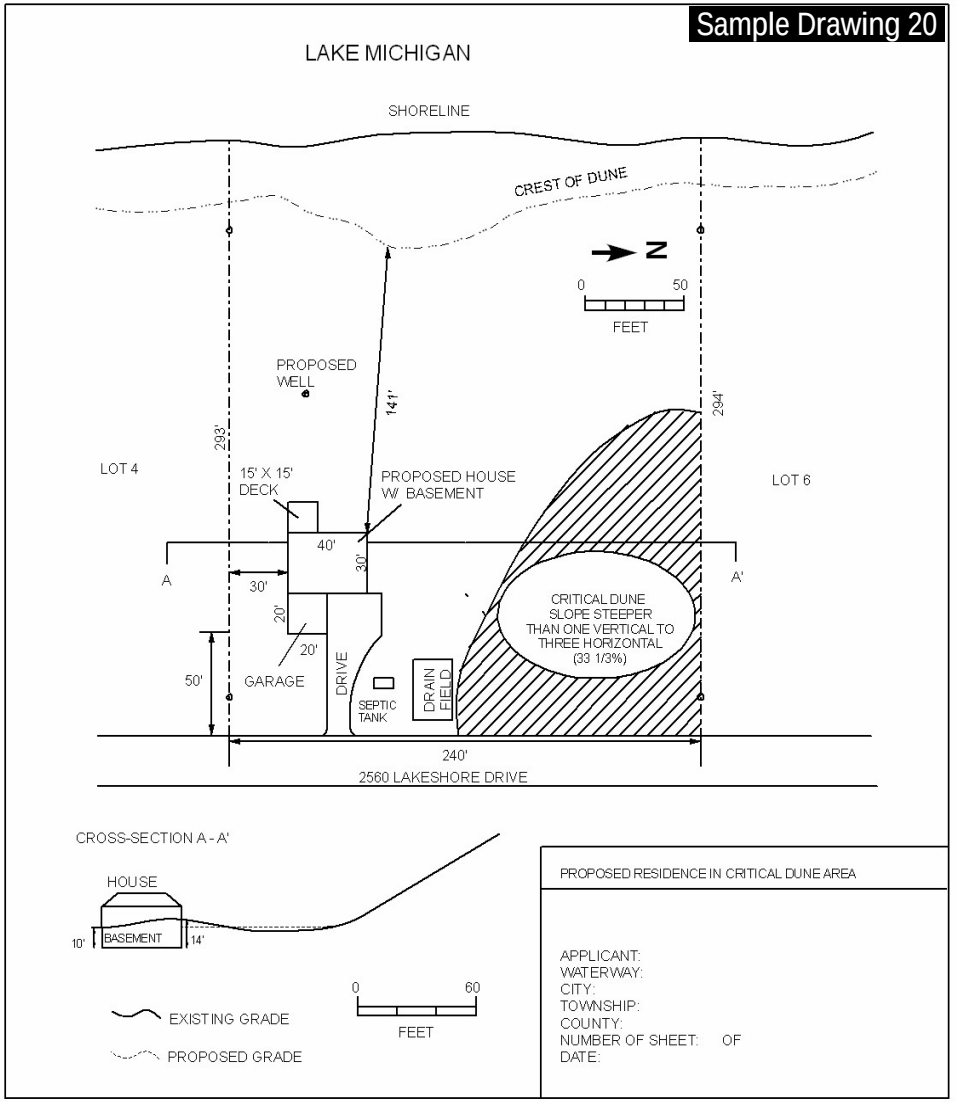
PROPOSED RESIDENCE IN HIGH-RISK EROSION AREA
APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEETS: OF DATE:

Complete Section 20 and Sections 10A, 10B, 10C, and 10D if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, location of water well, and property boundaries.
- ❑ Dimensions for all existing and proposed buildings, septic systems, and driveways.
- ❑ Applicable required *setback* dimensions (minimum distance (ft) from *erosion hazard line* to existing or proposed buildings or construction activities).
- ❑ Location and dimensions of proposed grading.
- ❑ Reference Sample Drawing 9 for required information if your proposed activities will impact a wetland.
- ❑ *Soil erosion and sedimentation control measures*.

Photographs are optional, but may assist staff in processing your application more quickly.

Sample Drawing 20



PROPOSED RESIDENCE IN CRITICAL DUNE AREA
APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEET: OF DATE:

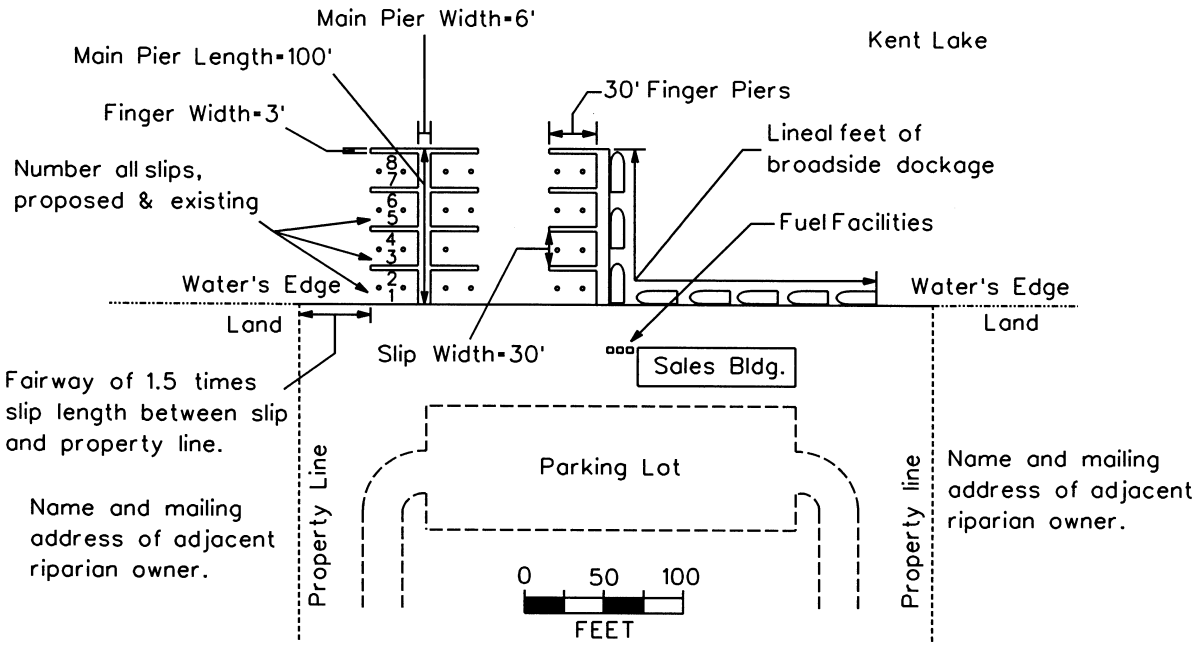
Complete **Section** 20 and Sections 10A, 10B, 10C, 10D, 12, and 21 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, location of water well, and property boundaries.
- ❑ Identify areas where slopes are between 25 and 33 percent and greater than 33 percent.
- ❑ Dimensions for all existing and proposed buildings, septic systems, and driveways.
- ❑ Minimum distance (ft) from crest of dune to proposed or existing buildings or construction activity (ft).
- ❑ Location and dimensions of areas where tree and other vegetation will be removed.
- ❑ Location and dimensions of proposed grading.
- ❑ Reference Sample Drawing 9 for required information if your proposed activities will impact a wetland.
- ❑ *Soil erosion and sedimentation control measures.*

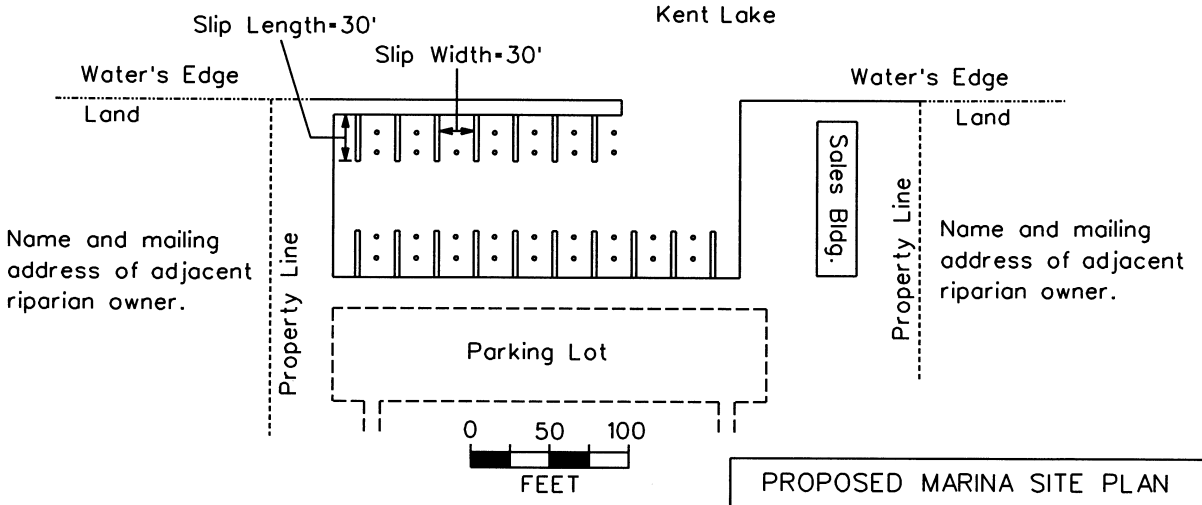
Photographs are optional, but may assist staff in processing your application more quickly.

Sample Drawing 21

MARINA SITE PLAN #1



MARINA SITE PLAN #2



Please include actual dimensions for all distances as shown in examples.

Do not include slip or dock length as lineal feet of broadside dockage.

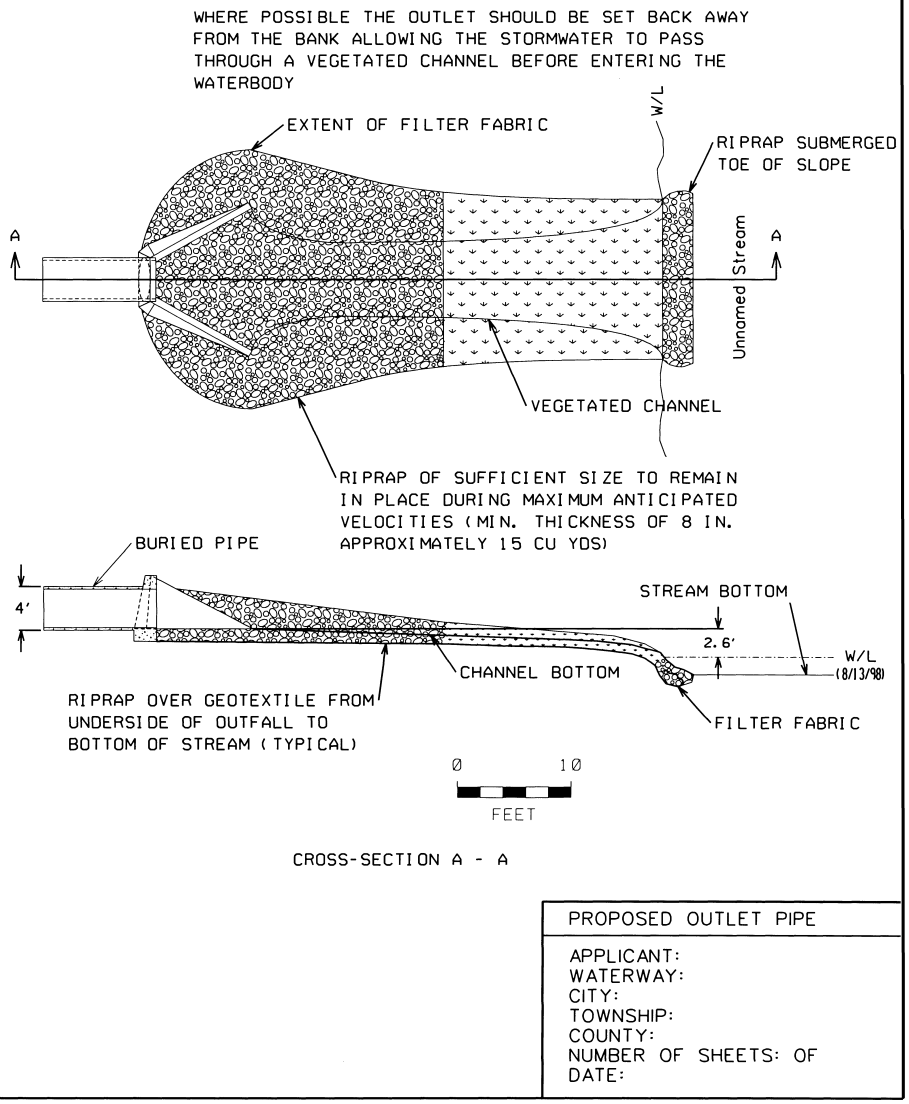
PROPOSED MARINA SITE PLAN

APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: OF
DATE:

Complete Section 19 and Sections 10, 12, and 21 if applicable to your project.
Provide ***plan view*** and ***cross-section*** site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, *floodplains*, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ *Soil erosion and sedimentation control measures.*
- ❑ Site specific proposed dimensions for all distances shown in Sample Drawings 10 and 21 if applicable to your project.
- ❑ Site specific information and dimensions shown on Sample Drawing 7 if dredging activity is proposed.
- ❑ Highest known and observed water elevations (ft) and dates of observations.
- ❑ Datum used (IGLD 85, NGVD 29, or local) and a description of the reference point or benchmark.

Sample Drawing 22

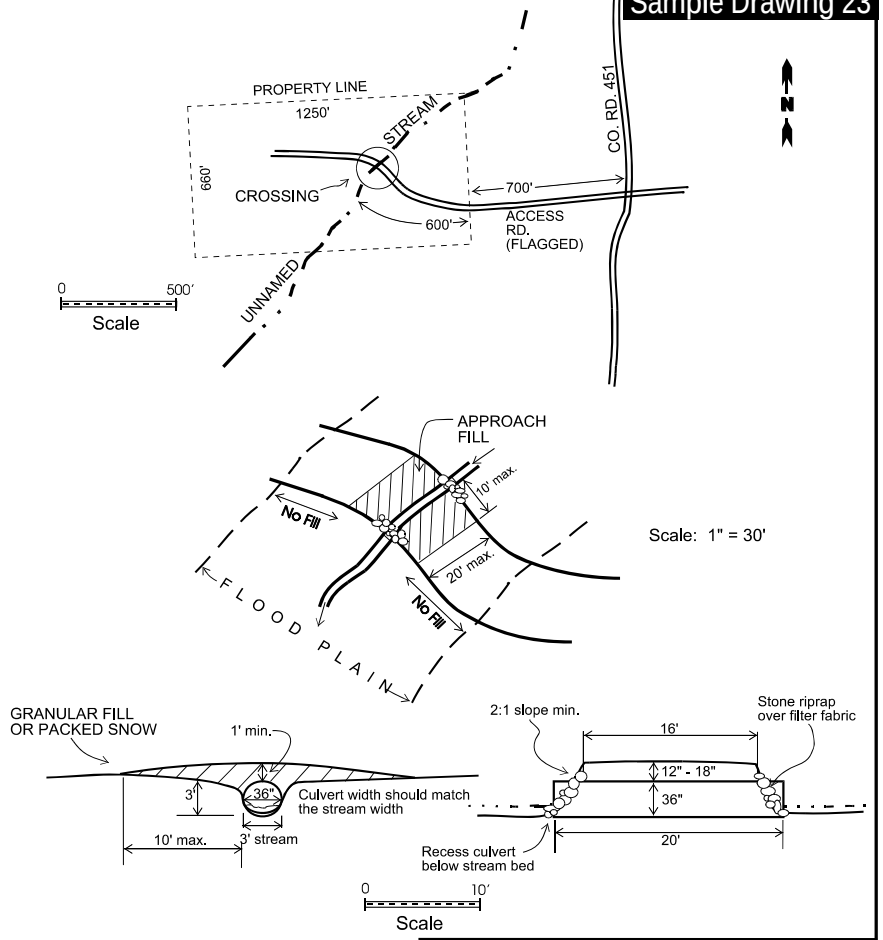


PROPOSED OUTLET PIPE
APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEETS: OF DATE:

Complete Section 10I and Sections 10A, 10B, 10C, 12, 13, and 15 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ *Soil erosion and sedimentation control measures.*
- ❑ Datum used (NGVD 29, IGLD 85, or local) and a description of the reference point or benchmark.
- ❑ *100-year floodplain* elevation (if known).
- ❑ Highest known and observed water elevations (ft) above or below reference point and dates of observations.
- ❑ Include number of pipes, pipe diameters, and pipe invert elevations.
- ❑ If on *Section 10 Waters,* provide pipe invert elevation in IGLD 85 or NGVD 29.

Sample Drawing 23



PROPOSED TEMPORARY LOGGING ROAD CROSSING
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

Complete Section 14 and Sections 10A, 10B, 10C, 12, 13, and 15 if applicable to your project.
Provide *plan view* and *cross-section* site-specific drawings adequate for detailed review, include:

- ❑ Overall site plan showing existing lakes, streams, wetlands, and other water features.
- ❑ Name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ *Soil erosion and sedimentation control measures.*
- ❑ Datum used (NGVD 29, IGLD 85, or local).
- ❑ Description of reference point and highest known water elevation (ft) above or below reference point and date of observation.
- ❑ 100-year *floodplain* elevation (if known).
- ❑ Site specific information shown in Sample Drawing 14D (Stream Profile View).

APPENDIX C

State Fees, Federal Fees, Minor Project Categories, and General Permit Categories for Minor Projects

STATE FEES

All permit applications for projects located on an inland lake or stream, Great Lake, or within a wetland or *floodplain* regulated by Part 301, Inland Lakes and Streams; Part 303, Wetlands Protection; Part 325, Great Lakes Submerged Lands; *Floodplain* Regulatory Authority found in Part 31, Water Resources Protection; Part 353, Sand Dunes Protection and Management; Part 323, Shorelands Protection and Management; or Part 315, Dam Safety, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), shall be accompanied by a fee in accordance with the following fee schedule. Fees are not cumulative, with the exception of *dam* and *critical dune* projects. The highest of all other fees will be charged. ***Final fee determination will be based upon the final administrative review of the plans and specifications provided with the permit application. The applicant will be notified if the final fee determination is different from that submitted with the application.***

CATEGORY	FEE
All projects not covered below.	$500
Minor and General Project Categories listed in R281.816 and Section 30105(8) for Part 301, or R322.1013 for Part 325*	$50
General Permit Categories for minor activities in wetlands authorized under Section 30312 of Part 303*	$100
Minor Project Categories authorized under Section 3104(5) of Part 31*	$100
Transfer of existing permit responsibility coverage and liability (Part 303)	$250
Minor revision to an existing permit that does not increase the overall impact to wetlands and that is within the original scope (Part 303)	$250
Marina Operating Permit Renewal or Transfer under Part 301.	$50
Marina Construction or Reconfiguration Projects under Parts 301 or 325.	
• reconfiguration of 1-10 slips	$50
• new marina of 1-10 slips	$100
• reconfiguration of 11-50 slips	$250
• new marina of 11-50 slips	$500
• new, or reconfiguration marina, over 50 slips	$10/slip
• existing marina - maintenance dredging of 10,000 cubic yards or more, or the addition of seawalls, bulkheads, or revetments of 500 feet or more	$1,500
Major Projects: Categories as listed below under Parts 301, 303, or 325	$2,000
• dredging of 10,000 cubic yards or more (wetlands excepted) • seawalls, bulkheads, or revetments of 500 feet or more • new commercial *docks* or wharves of 300 feet or more in length • stream relocations of 500 feet or more in length • filling of 10,000 cubic yards or more (wetlands included) • new dredging or upland boat basin excavation in suspected contamination areas • filling or draining of 1 acre or more of contiguous coastal or inland wetland • stream enclosures of 100 feet or more in length • new golf courses, subdivisions, or condominiums • shore protection that extends 150 feet or more into a lake or stream	
Critical Dune Area Projects under Part 353. Fees for Part 353 are in addition to other fees listed.	**See Page 2**
High Risk Erosion Area Projects under Part 323.	
• additions to an existing single-family home, garage, septics	$50
• single-family home, other single-family building, or building relocation	$100
• commercial or multi-family residential project	$500
Hydraulic review fee charged to Floodplain Projects where engineering computations are required to assess the impact of a proposed floodplain alteration on flood stage or discharge characteristics (This is in addition to the require application fee)	$1,500
Dam Projects under Part 315. Fees for Part 315 are in addition to the fees listed above.	
• dam height 6 feet or more, but less than 10 feet	$500
• dam height 10 feet or more, but less than 20 feet.	$1,000
• dam height 20 feet or more	$3,000
• dam repair, alteration, removal, or abandonment	$200
• minor projects pursuant to Section 27(1)*	$100

*****Minor Project Categories for Part 31, Part 301, Part 315, and Part 325, as well as General Permit Categories for Minor Activities under Part 303 and 301, are attached for your reference. If you would like a copy of a particular statute or administrative rules, you may submit a request to the Permit Consolidation Unit (PCU) at: MDEQ, LWMD, PCU, P.O. Box 30204, Lansing, MI 48909-7704, call 517-373-9244, or download a copy from our website at "www.michigan.gov/jointpermit."

FEDERAL FEES

All activities within the waters of the United States regulated by the USACE under the authority of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344) may also require a permit from the USACE. The USACE will notify you of the appropriate federal filing fee when their permit application review has been completed and a preliminary determination has been made that a permit will be required. Fees are assessed as follows:

CATEGORY	FEE
• commercial or industrial users	$100
• noncommercial users	$10

DO NOT SUBMIT ANY FEE TO THE USACE UNTIL YOU ARE NOTIFIED OF THE REQUIRED AMOUNT.
NOTE: The federal filing fee is in addition to any fee required by the state of Michigan.

Fees
Part 353, Sand Dunes Protection and Management , 1994 PA 451, as amended

$150
- Decks with a cumulative area of 225 square feet or smaller.

$250
- Removal of blow sand to maintain an existing use (5 year permit).
- Installation of retaining walls or other erosion protection devices up to 100 feet in cumulative length.
- Removal of more than two but less than ten trees, not related to a commercial logging activity.
- Decks greater than a cumulative area of 225 square feet.
- Request to modify an existing permit that has not expired.

$600
- Additions, garages, gazebos, and storage buildings.
- Retaining walls and erosion protection devices larger than 100 feet in cumulative length.
- Parking areas not associated with a special use project.
- New, replacement, or maintenance of utilities for a single-family home, including a septic system.
- Removal of ten or more trees, not related to a commercial logging activity.
- Expansion of any road or driveway.
- Demolition or removal of a building.

$1300
- All other uses not listed, including:
  - Construction of a single family home and associated infrastructure.
  - Construction of each additional home, cottage, or guest dwelling on one property.
  - Relocation of a single family home and associated infrastructure.
  - Construction of a driveway serving one single family home.

$2000
- An industrial or commercial use where the area of impact will be no larger than 1/3 of an acre.

$4000
- Construction of a road or driveway if the road or driveway has the potential to serve a multi-family development of more than two homes or to serve a special use project.
- An industrial or commercial use where the area of impact will be larger than 1/3 of an acre.
- A multifamily use of more than 3 acres.
- A multifamily use of 3 acres or less if the density of use is greater than 4 individual residences per acre.
- A project that would damage or destroy features of archaeological or historical significance.

$2000
- Application for Special Exception (in addition to the above fees).

Effective 4/26/2005

Minor Project Categories for Part 31, Water Resources Protection, of the NREPA

(a) Construction, filling, or grading that is landward of the *floodway* limit identified in *floodplain* delineation studies listed in R 323.1314(1).
(b) Construction, filling, or grading that is landward of the bed and banks of the St. Marys, St. Clair, and Detroit rivers.
(c) Construction, filling, or grading that is landward of the *floodway* limits as determined by the department on stream reaches or in areas where *floodways* have not been defined by R 323.1314(1).
(d) Any construction or filling which is located within the following critical floodwater storage areas and which is done on an individually owned subdivision lot where the construction and fill is confined to less than 5,000 square feet:
  (i) Clinton river forks, as follows: Land areas within the *100-year floodplain* of the Clinton river and branches within Clinton township and Macomb township, Macomb county.
  (ii) Saginaw river storage area, as follows: Land areas within the *100-year floodplain* of the Saginaw river and tributaries, including Cheboyganing and Dutch creeks, between the cities of Saginaw and Bay City, Saginaw and Bay counties.
  (iii) Shiawassee flats, as follows: Land areas within the *100-year floodplain* of the lower reaches of the Shiawassee, Cass, Flint, Tittabawassee, and Bad rivers within Saginaw county.
  (iv) Snake creek, as follows: Land areas within the *100-year floodplain* of Snake creek in the city of Midland, Midland county.
  (v) Rush creek, as follows: Land areas within the *100-year floodplain* of Rush creek in Georgetown township and the city of Hudsonville, Ottawa county.
  (vi) Frank and Poet drain, as follows: Land areas within the *100-year floodplain* of the Frank and Poet drain in the city of Trenton, Wayne county.
(e) A clear span bridge that has the lowest bottom of beam elevation at or above the natural ground elevations on either bank and the approach fill sloping to natural ground elevations within 10 feet on either end of the bridge.
(f) A culvert which has an effective waterway opening that equals or exceeds the cross-sectional area of the channel, which has the fill over the culvert that is not more than 1.5 feet, and which has approach fill that slopes to natural ground elevations within 10 feet on either side of the culvert.
(g) A boardwalk which is of open pile construction and which is landward of or along the existing shoreline.
(h) A pond where excavated materials are placed landward of the *floodway*, as defined in R 323.1311(g).
(i) A parking lot constructed at grade or resurfacing that is not more than 4 inches above the existing surface.
(j) A deck placed on a residential structure which is of open pile design, which is anchored to prevent flotation, and which does not extend over the bed and bank of a river or stream.
(k) A stormwater outfall which conforms to the side slope of the river, stream, or waterway and which does not project beyond the shoreline.

Minor Project Categories for Part 301, Inland Lakes and Streams, of the NREPA

(a) Noncommercial *piers*, *docks*, and *boat hoists* that meet all of the following design criteria:
  (i) The length or size of the proposed structure is not greater than the length or size of similar structures in the vicinity and on the watercourse and will not unreasonably interfere with the navigability or boatability of the water involved.
  (ii) Free littoral flow of water and drift material is provided for.
  (iii) Clean, nonpolluting materials will be used for the construction.
  (iv) The structure is a single pier or *dock* appurtenant to the applicant's upland or is an added boat hoist, minor pier, or extension to the existing boat hoist, pier, or *dock*.
(b) Spring piles and pile clusters that meet all of the following design and purpose criteria:
  (i) The location, number, and purpose for placement is usual for such projects in the vicinity and watercourse involved.
  (ii) All piles and other materials used in their placement are clean, nonpolluting materials.
  (iii) The location and placement will not create an obstruction to navigation.
(c) Seawalls, bulkheads, and other permanent revetment structures that meet all of the following purpose and design criteria:
  (i) The proposed structure fulfills an identifiable need for erosion protection, bank stabilization, or the protection of, or improvements on, uplands.
  (ii) The structure will be constructed of suitable materials free from pollutants, waste metal products, debris, or organic materials.
  (iii) The structure is not more than 300 feet in length and is located in an area on the body of water where other similar structures already exist. However, the department shall provide written notification to the adjoining riparian property owners for structures more than 200 feet in length. The department shall not complete action upon applications for such structures that are more than 200 feet in length for a period of 7 days from the mailing of the notification to allow adjoining riparian owners the opportunity to comment.
  (iv) The placement of backfill or other fill associated with the construction does not exceed an average of 2 cubic yards per running foot along the shoreline and a maximum of 300 cubic yards.
  (v) The structure or any associated fill will not be placed in a wetland area or placed in any manner that impairs surface water flow into or out of any wetland area.
(d) Filling for the creation and improvement of swimming areas and beaches, the restoration of existing permitted fills, fills placed incidental to construction of other structures, and fills that do not exceed 300 cubic yards as a single and complete project that meet both of the following design criteria:
  (i) The fill is of suitable material free from pollutants, waste metal products, debris, or organic materials.
  (ii) Fill for the improvement of swimming areas or beaches, utilizing clean sand or gravel, will not exceed a blanket depth of 6 inches and will not be placed in a water depth exceeding 4 feet.
(e) Dredging for the maintenance of previously dredged areas or dredging of not more than 300 cubic yards as a single and complete project when both of the following criteria are met:
  (i) No reasonable expectation exists that the materials to be dredged are polluted.
  (ii) All dredging spoils will be removed to an upland site exclusive of wetland areas.
(f) Construction of bridges and culverts, whether new, replacement, or temporary, and the removal of bridges or culverts with the restoration of the crossing site that meet all of the following criteria:
  (i) The bridge or culvert structure proposed is of a type and design, including certifications, described by one of the following:

(A) A clear span bridge that has the lowest bottom of beam elevation at or above the natural ground elevations on either bank and the approach fill sloping to natural ground elevations is within 10 feet on either end of the bridge.

(B) A culvert which has an effective waterway opening that equals or exceeds the cross-sectional area of the channel, which has fill over the culvert that is not more than 1.5 feet, and which has approach fill that slopes to natural ground elevations within 10 feet of either side of the culvert.

(C) The proposed structure is a replacement stream crossing which fully spans the bottomlands and the owner or the owner's engineering consultant certifies that the proposed structure is of equal or greater hydraulic capacity, that deletion of auxiliary waterway openings is not planned, and that available information does not indicate the presence of a *harmful interference*.

(D) The proposed structure is a new stream crossing structure that fully spans the bottomlands. The design of the structure is certified by a registered professional engineer to pass the *100-year* flood, as determined by the department, without causing *harmful interference*. The certification includes hydraulic waterway design calculations.

(E) The proposed structure is a new or replacement structure to be placed on an upland channel or similar artificially constructed waterway where consideration for the passage of flow is not a significant design factor.

(F) The proposed structure is an extension of an existing bridge or culvert where the total extended length does not exceed 24 feet.

(ii) The structure will provide sufficient underclearance to facilitate passage of watercraft that could be expected to navigate the waters involved.

(iii) The total volume of fill to be placed below the ordinary high water mark for placement of the structure does not exceed 200 cubic yards.

(iv) The removal of existing structures will be conducted without dropping demolition materials in the watercourse, and haul roads, work pads, or other structures to facilitate the removal will not be placed below the ordinary high water mark.

(v) The structures will be designed and placed to assure that any increase in stream erosion or downcutting is prevented.

(g) Watercourse crossings by utilities, pipelines, cables, and sewer lines that meet all of the following design criteria:

(i) A minimum of 30 inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings.

(ii) The method of construction proposed is the least disturbing to the environment employable at the given site.

(iii) Any necessary backfilling will be of washed gravel.

(iv) The diameter of pipe, cable, or encasement does not exceed 20 inches.

(h) Dredging and construction or enlargement of ponds, lagoons, ditches, stormwater management basins, and similar artificial waterways if the proposed activity meets both of the following criteria:

(i) The artificial watercourse will have a surface area of less than 5 acres and have no direct connection to an existing inland lake or stream.

(ii) The resulting spoils will be placed on an appropriate upland site in a manner that will not impair flood flows or be eroded into public waters.

(i) Structural repair of man-made structures that meets all of the following design and purpose criteria:

(i) The repair will not alter the original use of a currently serviceable structure.

(ii) The repair will not adversely affect public trust values or interests, including navigation, fish migration, and water quality.

(iii) Any materials used for repair will be made of nonpolluting materials.

(j) Fish or wildlife habitat structures that meet all of the following criteria:

(i) The structures are placed so as not to impede navigation or create a navigational hazard.

(ii) The structures are anchored to the bottomlands.

(iii) The structures are constructed of nonpolluting materials.

(iv) The structure placement has the written authorization of the riparian owner and the appropriate department district fisheries or wildlife biologist, or both.

(k) Scientific structures, such as staff gauges, water monitoring devices, water quality testing devices, survey devices, and core sampling devices, that meet all of the following design and purpose criteria:

(i) The structures do not impede navigation or create a navigational hazard.

(ii) The devices are constructed of nonpolluting materials.

(iii) The placement of any scientific structure has the written authorization of the riparian owner.

(l) Navigational aids that meet either of the following criteria:

(i) The aids are approved by the United States coast guard.

(ii) The aids are approved under Part 801 of the act.

(m) Extension of a project under a current permit that will not result in any damage to natural resources.

(n) Physical removal of man-made structures or natural obstructions that meet all of the following criteria:

(i) The debris and spoils shall be removed to an upland site in a manner that will not impair flood flows or be eroded into public waters.

(ii) The stream bank or shoreline and bottom contours shall be restored to an acceptable condition.

(iii) Upon completion of structure removal, the site does not constitute a safety or navigational hazard.

(iv) Department staff shall consider fisheries and wildlife resource values when evaluating applications for natural obstruction removal.

(o) Lake or impoundment drawdowns or the associated reflooding, or both, that meet the following design and purpose criteria:

(i) The purpose of the drawdown is described by one of the following criteria:

(A) The drawdown is temporary in nature for the purpose of inspection to determine the integrity of the impounding structure.

(B) The drawdown is associated with the routine operations of fish or wildlife floodings, ponds, or impoundments where the purpose of the drawdown is the enhancement or production of fish, wildlife, or associated habitat.

(C) A drawdown authorized by court order under the provisions of Part 307 of the act if the court has incorporated the department requirements into the court order or concurred in department recommendations to address environmental concerns under Part 301 of the act.

(ii) The potential adverse environmental effects of the drawdown have been determined to be minimal under R 281.814.

(p) Seismic cables across lakes and streams which are temporary in nature and which will be clearly identifiable by recreationists normally expected to use the body of water.

(q) Aquatic weed bottomland barriers that do not exceed 1600 square feet singly or in combination and that are installed with an anchoring system to assure permanent placement.

(r) Dry fire hydrant installations where the intake line will not interfere with navigability of the water involved.

(s) Storm water outlet structures where the activities do not exceed criteria of the designated minor project criteria for filling or dredging.

(t) Off-line stormwater basins constructed for storm water management that provide retention/detention and sediment settling or filtration before discharge.

(u) Boat ramps designed for single-family, private usage where the installation will not involve more than 10 cubic yards of dredging, with upland disposal, or filling.

(v) Aquatic plant removal with mechanical equipment designed to operate by air or water pressure or by raking or rolling actions if the treatment areas are 1600 square

feet or less, if the water depth is 4 feet or less, and if the uprooted floating debris is removed and disposed of within upland areas.

(w) Recreational mineral (gold) prospecting by mechanical methods, such as portable (backpack) suction dredges or sluice boxes, if the activity is for recreational reasons only and if all of the following conditions are met:
- (i) Individual prospecting areas are 300 square feet or less per location.
- (ii) The intake nozzle for suction dredges is 2 inches in diameter or less.
- (iii) Prospecting will not be done before July 1 or after August 31.
- (iv) Stream bank excavation will not occur.
- (v) The stream bottom is predominately gravel.

(x) Ditch plugs with or without water flow controls if the purpose is to reestablish the hydrology to previously drained areas, if all impacted parties acknowledge and provide their written authorizations, and if the proposed activities do not exceed other minor project criteria.

General Permit Categories for Minor Activities under Part 301, Inland Lakes and Streams, of the NREPA

Small Dams

1. The removal of small dams and associated restoration activities:
   - (a) The height of the dam is less than two feet.
   - (b) The impoundment from the dam covers less than two acres.
   - (c) The dam does not serve as the first dam upstream from the Great Lakes or their connecting waterways.
   - (d) The dam is not serving as a sea lamprey barrier.
   - (e) No state or federally listed threatened or endangered species have been identified in the area that will be impacted by the project.
   - (f) There are no known areas of contaminated sediments in the area that will be impacted by the project.
   - (g) The MDEQ has received written permission for the removal of the dam from all riparian property owners adjacent to the dam's impoundment including public transportation agencies with right-of-ways adjacent to the impoundment or has documented legal right to remove the dam.
   - (h) Excavation and fill in wetlands is authorized for purposes of dam removal, stream channel establishment, and bank stabilization only, and must be minimized to the greatest extent possible. Impacts to wetlands from excavation and fill activities are limited to less than one-third of an acre.
   - (i) The dam removal is not associated with a federally designated wild and scenic river.
   - (j) If a dam removal also requires a permit under the Floodplain Regulatory Authority found in Part 31, it must meet one of the minor categories.
   - (k) The dam removal cannot require a permit under Part 353, Sand Dunes Protection and Management, of the NREPA.
2. Applications for authorization under this GP must include a dam removal plan that includes the following information:
   - (a) A description of the upstream and downstream impacts of the dam removal, including impacts to fish and wildlife and recreational uses.
   - (b) Dam removal/excavation methods and a schedule and timeline of the proposed impoundment drawdown.
   - (c) A description of sediments behind the dam, including a sediment handling (and if necessary, disposal) plan and methods to minimize release of sediments and downstream siltation.
   - (d) A stream channel restoration plan, including a planting and stabilization plan for all disturbed areas (e.g., drawdown areas and stream banks).
   - (e) A plan view of the area of wetlands to be drained by the dam removal.

Oil and Gas Pipelines

1. Maintenance and repair of oil or gas pipelines that cross lakes or streams:
   - (a) Where repair and replacement of the existing pipeline can be completed using directional drilling/boring[1];
   - (b) If directional drilling/boring is not feasible and prudent, where repair and replacement can be completed using dry ditch open trenching that will not impact a waterbody wider than 50 feet at any one crossing; or
   - (c) If directional drilling/boring is not feasible and prudent, where repair and replacement can be completed using open cut crossings carried out under wet, flowing water conditions that will not impact a waterbody wider than ten feet at any one crossing.

     All maintenance and repair activities shall be carried out in a manner that will minimize adverse impacts to wetlands and other aquatic resources. The construction of new, permanent access roads is not authorized under this GP.

All pipeline repair and maintenance projects shall follow the relevant and appropriate procedures and best management practices (BMPs) outlined in the Federal Energy Regulatory Commission (FERC) "Wetland and Waterbody Construction and Mitigation Procedures," dated January 17, 2003[2], or an equivalent manual of procedures and BMPs approved in advance by the LWMD, with the additional conditions and limitations noted below. The specific repair procedure that will be used once a pipeline is exposed at a given crossing does not have to be identified in advance of authorization under this GP as long as such procedures are included in the approved BMP Manual. This GP does not mandate the presence of Environmental Inspectors at all times, but an Inspector must be available to ensure compliance with BMPs.

No written authorization is required for the maintenance and repair of oil or gas pipelines that cross wetlands provided that the project sponsor follows procedures and BMPs in an approved manual, as well as the conditions and limitations in this GP. This will ensure compliance with the Part 303 exemption that requires that adverse effects on the wetland be minimized.

[1] Where such activity is not otherwise exempt from the permit requirements under the provisions of Part 301.
[2] This document is available on the FERC web site, or on the DEQ website at www.michigan.gov/deqwetlands.

Minor Project Categories for Part 315, Dam Safety, of the NREPA

(1) The department shall grant or deny an application for a minor project after all of the following steps have been completed:
   - (a) Submission of a complete application.

(b) An on-site inspection by a department representative.
(c) A review of all appropriate information by the department.

(2) A review of a minor project does not require any of the following:
(a) Submission of the application materials by the department to any of the individuals or agencies listed in Section 23(1) of the act.
(b) A 20-day comment period as provided for in Section 23 of the act.
(c) A public hearing.

(3) Required plans and specifications for a minor project do not need to be prepared by a licensed professional engineer.

(4) The following alterations and repairs shall be considered minor projects pursuant to Section 27 of the act if the activity involves a temporary drawdown of 2 feet or less or involves a temporary drawdown where the dam owner is the sole riparian to the lands surrounding the impoundment:
(a) Dredging or filling of more than 25 cubic yards, but less than 300 cubic yards, as a single and complete project. For dredging projects, the project will not be considered minor unless evidence is provided with the application that the materials to be dredged are not contaminated pursuant to the provisions of Act No. 64 of the Public Acts of 1979, as amended, being ∋299.501 et seq. of the Michigan Compiled Laws.
(b) Erosion protection measures that fulfill an identifiable need for erosion protection, bank stabilization, or the protection or improvement of the *dam* and its inlet and outlet channels. The fill material that is associated with erosion protection measures shall be in compliance with any of the following provisions:
(i) It shall have a volume of more than 25 cubic yards, but shall not have a volume of more than 300 cubic yards.
(ii) It shall not have a surface area of more than 10,000 square feet.
(iii) There shall not be more than 2 cubic yards per lineal foot.
(c) Other repairs and alterations that have a minimal effect on the structural integrity of the *dam*.

(5) Dredging or filling in volumes of less than 25 cubic yards shall be considered maintenance and does not require a permit pursuant to the provisions of the act.

Minor Project Categories for Part 325, Great Lakes Submerged Lands, of the NREPA

(1) The department may process applications in accordance with R 322.1014 for those projects of a minor nature which are not controversial; which have minimal adverse environmental impact; which will be constructed of clean, nonpolluting materials; which do not impair the use of the adjacent bottomlands by the public; and which do not adversely affect riparian interests of adjacent owners.

(2) The following projects are eligible for a minor project permit:
(a) Noncommercial single *piers, docks, and boat hoists* which meet the following design criteria:
(i) Are of a length or size not greater than the length or size of similar structures in the vicinity and on the watercourse involved.
(ii) Provide for the free littoral flow of water and drift material.
(b) Spring piles and pile clusters when their design and purposes are usual for such projects in the vicinity and watercourse involved.
(c) Seawalls, bulkheads, and other permanent revetment structures which meet all of the following purpose and design criteria:
(i) The proposed structure fulfills an identifiable need for erosion protection, bank stabilization, protection of uplands, or improvements on uplands.
(ii) The structure will be constructed of suitable materials free from pollutants, waste metal products, debris, or organic materials.
(iii) The structure is not more than 300 feet in length and is located in an area on the body of water where other similar structures already exist.
(iv) The placement of backfill or other fill associated with the construction does not exceed an average of 3 cubic yards per running foot along the shoreline and a maximum of 300 cubic yards.
(v) The structure or any associated fill will not be placed in a wetland area or placed in any manner that impairs surface water flow into or out of any wetland area.
(d) Groins: The Land and Water Division has determined that groin shore protection structures have a greater than minor impact to the environment and to adjacent owner riparian interest. Effective April 17, 2006, applications to construct or repair "groins" regulated under Part 325, Great Lakes Submerged Lands, of the NREPA, as amended, will be placed on Public Notice, per MDEQ Director's "Decision Document", signed February 22, 2006
(e) Filling for restoration of existing permitted fills, fills placed incidental to construction of other structures, and fills that do not exceed 300 cubic yards as a single and complete project, where the fill is of suitable material free from pollutants, waste metal products, debris, or organic materials.
(f) Dredging for the maintenance of previously dredged areas or dredging of not more than 300 cubic yards as a single and complete project when both of the following criteria are met:
(i) No reasonable expectation exists that the materials to be dredged are polluted.
(ii) All dredging materials will be removed to an upland site exclusive of wetland areas.
(g) Structural repair of man-made structures, except as exempted by R 322.1008(3), when their design and purpose meet both of the following criteria:
(i) The repair does not alter the original use of a recently serviceable structure.
(ii) The repair will not adversely affect public trust values or interests, including navigation and water quality.
(h) Fish or wildlife habitat structures which meet both of the following criteria:
(i) Are placed so the structures do not impede or create a navigational hazard.
(ii) Are anchored to the bottomlands.
(i) Scientific structures, such as staff gauges, water monitoring devices, water quality testing devices, survey devices, and core sampling devices, if the structures do not impede or create a navigational hazard.
(j) Navigational aids which meet both of the following criteria:
(i) Are approved by the United States coast guard.
(ii) Are approved under Part 801, Marine Safety, of the NREPA, being ∋324.80101 et seq. of the Michigan Compiled Laws.
(k) Extension of a project where work is being performed under a current permit and which will result in no damage to natural resources.
(l) A sand trap wall which meets all of the following criteria:
(i) The wall is 300 feet or less in length along the shoreline.
(ii) The wall does not extend more than 30 feet lakeward of the toe of bluff.
(iii) The wall is low profile, that is, it is not more than 1 foot above the existing water level.
(iv) The wall is constructed of wood or steel or other nonpolluting material.
(m) Physical removal of man-made structures or natural obstructions which meet all of the following criteria:

(i) The debris and spoils shall be removed to an upland site, not in a wetland, in a manner which will not allow erosion into public waters.
(ii) The shoreline and bottom contours shall be restored to an acceptable condition.
(iii) Upon completion of structure removal, the site does not constitute a safety or navigational hazard.
(iv) Department staff shall consider fisheries and wildlife resource values when evaluating applications for natural obstruction removal.

General Permit Categories for Minor Activities under Part 303, Wetlands Protection, of the NREPA

Section 30311 of the NREPA specifies the criteria that must be met before a permit authorization may be issued. These general criteria, as well as the specific criteria below, must be met before the LWMD can issue an authorization under a GP.

- A permit for an activity shall not be approved unless the department determines that the issuance of the permit is in the public interest, that the permit is necessary to realize the benefits derived from the activity, and that the activity is otherwise lawful.
- A permit shall not be issued unless it is shown that an unacceptable disruption will not result to the aquatic resources. A permit shall not be issued unless the applicant also shows either of the following:
  (a) The proposed activity is primarily dependent upon being located in the wetland.
  (b) A feasible and prudent alternative does not exist."
- The types of activities described below can typically be processed as minor actions. However, some activities will not qualify for this type of processing even if the listed criteria are met. Applications will not qualify for consideration under these categories if:
  (a) It is determined that the proposed project would constitute a "major discharge" subject to Federal review under any State-Federal memorandum of agreement
  (b) The wetland is associated with sensitive natural resource areas including:
    (i) a Federally designated wild and scenic river,
    (ii) a State designated natural river,
    (iii) a State or Federally designated wilderness or environmental area,
    (iv) a riverine floodway, unless qualified as a Minor Project under Part 31,
    (v) a State or Federally listed or proposed threatened or endangered species (unless alternative procedures are followed to coordinate with federal agencies, or the landowner has obtained a letter of no impact from the Michigan Department of Natural Resources),
    (vi) an identified historic or archeological area,
    (vii) an identified recharge area for drinking water aquifers,
    (viii) an identified rare or unique ecological type;
  (c) The LWMD determines that the decision making process would benefit from public review of the application;
  (d) The LWMD determines that a specific activity that would generally qualify as minor would, due to the proximity of other projects and the characteristics of the wetland, likely lead to adverse cumulative impacts;
  (e) The project also requires a permit under Parts 31, 301, or 325 but does not meet one of the minor categories under those parts; or
  (f) The project also requires a permit under Parts 315 or 353.

A) Small Ponds

- The proposed activity must meet the following specific criteria.
  1. Construction of a pond or ponds that are not directly connected to an existing inland lake or stream, impacting a total of not more than one third acre of wetland;
  2. Maintenance dredging of man-made ponds up to one acre in size that were previously authorized under this part or under Part 301 where such ponds are not directly connected to an inland lake or stream.
- All dredge spoils including organic and inorganic soils, vegetation and debris shall be placed at an upland site, leveled and stabilized with sod, or seeded and mulched in such a manner as not to erode into any water body or wetland, and not be located in a floodway or harmfully interfere with flood flows.
- This GP category does not authorize impacts to forested wetlands, locally uncommon wetlands types, or wetlands that are of a rare or unique ecological type on a statewide basis.
- Only one permit under this GP category may be authorized on the same parcel of property within any five year period.

B) Simple Elevated or Floating Structures

- The proposed activity must meet the following specific criteria.
  1. Boardwalks. Open pile or floating boardwalks constructed of appropriate non-polluting materials used to access wetlands or open water provided that they do not exceed 6 feet in width, except for widening to allow passage of wheel chairs, etc., at 150-foot intervals, and have a maximum cumulative length through wetlands of 500 feet.
  2. Platforms. Open pile or floating platforms constructed of appropriate non-polluting materials not to exceed 120 square feet of surface area.
- Roofs and walls are not authorized for structures included in this category. However, railings may be authorized if proper justification is provided by the applicant and determined by the LWMD to be necessary during the review process.

C) Fences

- The proposed activity must meet the following specific criteria.
  1. Residential Fences. Residential open construction fences elevated above the wetland on poles to allow for migration of reptiles, amphibians, and other small wildlife. Fences shall be limited to 5 feet in height and 150 feet in total length through wetland. (Note: This subcategory does not include fences that impact an inland lake or stream.)
  2. Livestock Fences. Open construction wire, plastic, or wooden fences elevated above the wetland on poles, with or without electric wires, designed to control livestock and limited to 5 feet in height and 200 feet in length through wetlands.
  3. Airport and other Security Fences. Perimeter fences placed for security and safety purposes at airports as mandated by the Federal Aviation Administration, at other facilities as mandated by the Federal Department of Homeland Security, or at military bases. Mowing of up to 12 feet on either side of the fence is allowed under this category.
- All fences must be constructed of non-polluting materials.
- This GP category is for placement of fencing only. It does not authorize placement of fill for access roads, berms or any similar purpose, nor does it authorize excavation for drainage ditches.

- This GP category does not authorize fences designed to exclude wildlife from wetlands or to provide cervidae enclosures.

D) Walkways on Public Lands or Lands Managed by Nonprofit Conservation Organizations

- Walkways or footpaths on public lands or on lands that are owned or managed by nonprofit conservation organizations, not to exceed 6 feet in base width and 200 feet in length where boardwalks or elevated walkways are not feasible or practical. Culverts will be required where necessary to provide for the free flow of surface water. If in a floodway, the grade elevation change shall not exceed four inches. This category only applies to areas that do not have standing water.

E) Driveways

- Construction of new driveways or the widening of existing driveways, provided that:
  1. Any upland on the property or other alternatives, such as obtaining a permanent easement for access from adjacent upland if available or shared driveway, is utilized to the greatest degree possible.
  2. The location of the driveway is at the least damaging place on the property (e.g., as close to any upland edge as possible or terminating in the upland nearest to the road access) and the driveway crosses the shortest wetland area or area of least impact. This GP category cannot be used to authorize a wetland crossing to achieve proximity to lakes, streams, or other features if an upland building site is available without crossing the wetland.
  3. The portion or portions of the driveway that pass through wetland are restricted to a total of 16 feet in base width (includes the width of any existing drive and associated fill), or are of clear span or open pile construction, and are a total of 200 linear feet. The driveway may be wider than 16 feet at the intersection with the public road if the applicant provides proof that the additional width is a requirement of a public transportation agency. No ditches may be placed in the wetland in association with the driveway.
  4. The driveway must terminate at a buildable upland site.
- Culverts shall be placed as necessary to provide for the free flow of surface and subsurface water and the movement of organisms. Fill shall be placed on filter fabric, or equivalent material if warranted by soil conditions.

F) Utilities

- The placement of utilities through wetland, including activities such as:
  1. Sewer and water line construction;
  2. Electric transmission and telephone poles and lines (but not including construction of transmission towers);
  3. Underground utility lines (cable, fiber optics, telephone); or
  4. Oil/gas pipelines with outside diameter larger than six inches.
- Crossing locations shall be selected to minimize the impact to the wetland.
- The outside diameter of the pipe, cable, encasement, etc., shall not exceed 20 inches.
- Construction shall be completed using construction methods, equipment, and materials that will minimize the impact on the wetland, using the following sequence of preferred methods.
  1. Directional boring must be used where it is necessary to cross a wetland, and it is feasible and prudent to use this method. (Jack and bore methods may be used for short crossings.) Use of this method should be given particular emphasis in any area that is prone to erosion, on slopes upgradient from coldwater streams, in forested wetland habitat, in high quality wetlands or wetland types that are locally uncommon, and in any wetland that contains a rare or imperiled community type as defined by the Michigan Natural Features Inventory or LWMD.
  2. Plowing-in or knifing-in of utility lines may be used in wetland areas where it is not feasible and prudent to use directional boring - for example, along existing road or utility corridors, or in some wetland types where impacts are minimal. Plowing-in is to be avoided in forested areas where trees must be removed, thereby opening a new corridor; in these areas, directional boring is clearly preferred.
  3. Open-trenching is acceptable only when it has been determined that the wetland crossing cannot be avoided, and that no other method is feasible and prudent.
- When these methods are used, the following additional criteria apply.
  1. Directional Bore or Jack and Bore (No limit on distance of wetland crossing):
     (a) The entrance and exit locations of the bore shall be located entirely in uplands outside of the wetland, and isolated with double rows of properly installed silt fencing.
     (b) Where it intersects the wetland, the top of the bore hole shall be a minimum of 48 inches below the wetland surface elevation.
     (c) A plan for preventing and controlling the loss of drilling mud into the wetland must be submitted with the application.
  2. Plowing-in / Knifing-in Utility Line Installation (No limit on distance of wetland crossing):
     (a) This method is used for utility lines of a size that can be immediately placed in a temporary trench causing minimal disturbance in wetlands.
     (b) The utility will be immediately installed and areas immediately restored to grade.
     (c) No additional fill materials (other than utility itself) shall be placed in the wetland.
     (d) Any rutting or other soil disruption areas shall be restored and stabilized using a native Michigan wetland seed mix with purchase receipts provided to the DEQ.
     (e) This method should not cross open water wetland areas.
  3. Open Trench Method (Maximum 500 feet total wetland crossing):
     (a) Project design and construction features shall assure that backfill used in the excavated trench will not result in the drainage of the wetland. Clay plugs shall be placed at the wetland/upland boundary and as needed throughout the trench system.
     (b) Construction mats shall be utilized to the greatest extent possible to minimize ground compaction and disturbance of the wetland vegetation.
     (c) Excavated materials shall be stockpiled and used to backfill the trench area with the top 6-12 inches of topsoil being stockpiled separately to backfill the top portion of the trench.
     (d) Excess excavated material shall be removed from the wetland area and placed and properly stabilized in an upland (non-wetland, non-floodplain) area.
     (e) Any excavated materials sidecast or stockpiled in the wetland shall not remain in the wetland for more than 30 days.
     (f) All disturbed areas shall be restored within 30 days of completion of the installation, to original grade, soils de-compacted, and seeded with a native Michigan wetland seed mix with purchase receipts provided to the DEQ.

G) Oil, Gas, and Mineral Well Access Roads

- Access roads for oil/gas drilling or mineral well drilling activities, where angle drilling from upland is not feasible, and where the activity is of minor impact to the wetland on both an individual and cumulative basis. The access road where constructed in wetlands shall not exceed 20 feet in base width and 300 feet in length, and shall be placed on filter fabric or equivalent material. Culverts will be required, where necessary, to provide for the free flow of surface or subsurface water or to avoid restricting low flows and the movement of aquatic organisms.
- Immediately upon plugging the well, all fill material shall be removed, the original wetland contours restored, and the site stabilized with a wetland seed source and mulched if necessary. The applicant shall provide a restoration plan, including a construction sequence, defining how any permitted wetland fill will be removed and

the site restored.

H) Stormwater Outfalls
- Stormwater outfalls, provided that the outlet is riprapped or otherwise stabilized to prevent soil erosion and the stormwater will be pretreated by incorporating permanent Best Management Practices, will meet State water quality standards and applicable discharge permit requirements, and will have no more than minimal adverse impact to the hydrology of the wetland. All efforts should be made to minimize any changes in the wetland watershed area and the predevelopment quantity of water that the wetland receives.

I) Culverts
- Culverts, if installed for water level equalization, i.e., to provide for the free flow of surface water between portions of a wetland system, and to equalize the static water pressure.

J) Emergency Drain Maintenance
- Projects not otherwise exempt under Section 30305(2)(h) involving maintenance, repair, or operation of an existing drain where necessary to alleviate flooding on an emergency basis, providing that:
  1. The activity does not otherwise require a permit under Part 301, Inland Lakes and Streams, of the NREPA;
  2. The area and extent of current wetlands will not be diminished; and
  3. The activity is limited to restoring the drain to depths and widths that do not exceed historic constructed dimensions as defined by the original permit issued under Parts 301 and/or 303, or by the original engineering design in the instance of a drain constructed prior to the effective date of Part 301.

K) Drain management & conservation practices
- The following activities when carried out in conjunction with routine management of county and intercounty drains established pursuant to the Drain Code of 1956 by County Drain Commissioners or their agents:
  1. Localized drainage or fill of wetlands associated with reshaping of banks for the purposes of increasing bank stability. This category may be used to authorize activities such as flattening of slopes where the banks of drains have been historically maintained with an excessively steep grade; establishing low-flow channels within a drain; and installing bioengineered bank stabilization materials. The purpose of the project must be to modify the cross section of currently serviceable drainage ditches to improve water quality by reducing bank erosion, and may not result in drainage of wetlands beyond the immediate project area.
     A project authorized under this GP is limited to one mile of drain impact (cumulatively) for the entire authorized project, and alteration of the drain cross section may not directly impact more than 1/3 acre of wetland outside of the existing channel. All new slopes must be stabilized with vegetation native to Michigan or bioengineering materials. This subcategory does not include deepening of the drain beyond its original constructed depth, or relocation of the drain, or significant change in the location of the centerline of the drain. Excavated materials must be disposed of and stabilized in an upland, non-floodplain, location, except when a berm is needed along the ditch to minimize adjacent wetland drainage.
  2. Minor repair/stabilization of streambank above the Ordinary High Water Mark (OHWM) in wetland. Placement of up to five cubic yards of clean fill per repair in wetlands above the OHWM to stop streambank erosion, or to repair damage from falling trees or similar events. The area filled must not significantly exceed the elevation of the original streambank, and must be stabilized with vegetation native to Michigan or other appropriate material to prevent further erosion.

L) Septic System Replacement
- Replacement of a failed on-site septic tank and/or drain field system providing that it is required by and meets design standards of the local health department. When possible the replacement tank and field system must be in the same location as the original system. Where the option is available, pump-back systems to upland will be required in place of mounded systems in order to qualify for construction under this GP category. A copy of the local health department permit or permission must be submitted to the LWMD at the time of application.

M) Repairs to Serviceable Structures
- Repairs to a serviceable structure that is not otherwise exempt from permits under Part 303 provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated in the original design. This category applies to structures in existence on October 1, 1980, or constructed pursuant to Part 303. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, current construction codes, or safety standards, that are necessary to make repairs may still be considered under this category providing that the environmental impacts resulting from the entire repair are minimal. Serviceable means useable as is or with minor repair, but not so degraded as to essentially require reconstruction. Serviceable structures damaged by storms, floods, fire, or other discrete events are included under this category provided that the repairs are commenced or under contract to commence within one year of the date of the damage.
- This GP category cannot be used to authorize any alteration of drains, which are not considered “serviceable structures” for purposes of these regulations.

N) Emergency Spill Cleanup
- In addition to the General Criteria and Limitations outlined above, the proposed activity must meet the following specific criteria.
- Activities required for the emergency containment and cleanup of oil and hazardous substances provided that::
  1. The work is done in accordance with State or Federal contingency plans;
  2. The MDEQ division or Federal agency responsible for requiring the spill cleanup concurs with the proposed containment and cleanup actions, and the applicant provides some proof of this concurrence with the application; and
  3. The wetland will be fully restored to its original condition prior to the discharge or spill.

O) Cleanup of Hazardous Substances and Hazardous and Toxic Waste
- Specific activities required to affect the containment, stabilization, or removal of hazardous substances or hazardous or toxic waste materials that are performed, ordered, or sponsored by the U.S. Environmental Protection Agency (USEPA) or the MDEQ provided that the plan prevents, to the extent feasible, any impacts to water or wetlands. The application must include a delineation of the affected wetland and a letter from the agency requiring the cleanup confirming the need for and explaining the scope of the cleanup. Court-ordered remedial action plans or related settlements also qualify under this category. This category does not include the establishment of new disposal sites, nor does it include improvements or expansions of existing sites, such as caps, leachate collection ponds, access roads, etc., that are used for the disposal of hazardous or toxic wastes, all of which will be processed as individual permit applications.
- The LWMD will coordinate with USEPA’s 404 Program staff on all applications submitted under this category.

P) Maintenance Dredging of Man-Made Stormwater and Wastewater Treatment Ponds and Lagoons
- Excavation and removal of accumulated sediment for maintenance of functional and active stormwater retention or detention basins, sediment basins, treatment ponds and lagoons, or other man-made water treatment or retention areas created for those sole purposes. Dredged material must be placed in an upland site outside of regulated floodplains and stabilized with sod, or seeded, mulched, or riprapped, as necessary, to prevent soil erosion into any inland lake, stream, or wetland; or dredged material may be placed in a licensed landfill based on sediment leachate analysis of the material. The applicant shall submit the analytical

results and sampling locations with the application. The upland disposal sites or licensed landfill must be identified in the plans.

Q) Public Road Projects

- Public road projects contained within the existing right-of-way where all practical means have been used to minimize the wetland impact, and all components of the project will impact no more than two acres of wetland. This category shall be further restricted to the following:
  1. Safety Improvements. The following projects which, after a finding of necessity by the public transportation agency, are determined to be required for safety reasons and for which the wetland fill will not exceed one-third acre per wetland.
     a) Flattening of road slopes to meet the minimum safety standard.
     b) Construction of standard shoulder widths.
     c) Installation of guardrail flares.
     d) Intersection improvements.
     e) Elimination of roadside obstacles, such as sign platforms and utility poles.
     f) Addition of a lane for safety reasons.
     g) Open construction highway fencing elevated above the wetland on poles limited to five feet in height.
  2. Roadside Ditch Maintenance. Re-establishment of existing roadside ditches to the original size, shape, and location where the draining of adjacent wetlands will not occur. Excavated materials must be disposed of and stabilized on upland, except when a berm is needed along the ditch to minimize adjacent wetland drainage.
  3. Equalizer Culverts. Replacement, extension, or maintenance of an existing equalizer culvert that is required to maintain a hydraulic connection and static water pressure between parts of a wetland severed by an existing roadway where the extension will not exceed the toe of slope on either side of the fill.
  4. Temporary Work Pads. Temporary work pads where the site will be restored to its preconstruction condition within one year.

R) Minor Residential Construction for Parcels Owned Since 1980

- Construction or expansion of a single family residence with the total impact area in wetlands not exceeding one-quarter acre for all phases of the residential construction, including a driveway [*Note: this GP category cannot be used in conjunction with Category E. Driveways*] a one- or two-car garage, small storage shed (not to exceed 100 square feet), foundation fill, and all waste treatment facilities, provided that::
  1. The ownership of the parcel of land shall have been maintained within the immediate family (the original owners or their children) since October 1, 1980. This category can be used only once on a parcel of land that existed prior to October 1, 1980, and only one permit can be granted to a family. It cannot be used on parcels established on or after October 1, 1980. Only one permit under this minor fill provision of the GP may be granted to a person.
  2. No fill shall be placed in any part of a wetland that is inundated by water and provides fish habitat functions at any time.
  3. All upland on the property shall be utilized to the greatest degree possible.
  4. The proposed fill in wetlands shall be at the least damaging location on the property.
  5. All necessary actions shall be taken to minimize on-site and off-site impacts including sewage treatment systems that pump back to uplands where feasible.
  6. The filled area surrounding building foundations will not be greater than 15 feet from the edge of the foundation to the toe of the slope. Fill slopes shall not be flatter than 1 vertical to 4 horizontal. Additional fill for purposes such as landscaping or recreational facilities will not qualify under this category.

S) Scientific Measuring Devices and Test Wells

- Scientific structures, such as staff gauges, water monitoring devices, water quality testing devices, core sampling devices, and small test wells and piezometers. All such devices must be constructed of nonpolluting materials. The placement of any scientific structure or device must have the approval of the property owner. Placement of any scientific device must require no more than an insignificant amount of excavation or fill as necessary to establish a solid base for installation of equipment, or covering of installed devices.
- This GP category shall not be used to authorize:
  1. Weirs or other structures that impede the flow of water or alter the water elevation on a site.
  2. Water extraction wells, oil and gas exploration wells, or other large scale well drilling.
  3. The construction of haul roads or temporary access roads.

T) Fish and Wildlife Habitat Structures

- Fish and wildlife habitat structures (e.g., nesting platforms) placed in wetlands, where, (a) the property is owned and managed by a State or Federal resource agency and the structures are placed in accordance with an approved management plan, or (b) a private landowner has received the written authorization from the appropriate Department of Natural Resources' District Fisheries or Wildlife Biologist.
- All such structures must be constructed of non-polluting materials that will not degrade habitat for existing species. Placement of any habitat structure must require no more than an insignificant amount of excavation or fill necessary to establish a solid base for installation of equipment, or covering of installed devices.
- This GP category will not be used to authorize:
  1. Weirs or other structures that impede the flow of water or alter the water elevation on a site.
  2. Excavation of ponds or placement of berms or other structures that require placement of a significant volume of fill.
  3. The construction of haul roads or temporary access roads.

U) Wetland Habitat Restoration and Enhancement

- This category applies only to projects that serve to restore or enhance wetland functions and shall not result in a net loss of wetland acreage or function. Projects under this category are limited to those being conducted by or in cooperation with State or Federal agencies and nonprofit conservation organizations.
- For this category, altered wetlands include areas that have been partially or fully drained by ditching, tiling, and/or pumping; or partially or fully filled by direct placement of material or significant sedimentation; or where other land use conversions have resulted in significant alteration of the original character of the site.
  1. Shallow Water Development for Wildlife ("Pushouts").
     Construction or maintenance of individual shallow water developments for wildlife (generally known as "pushouts") within altered wetlands, provided that the proposed activity meets all of the following criteria.
     a) At least 50 percent of the surface area of the pushout shall have a water depth of no more than 18 inches, and the maximum depth of the pushout shall be no more than 72 inches.
     b). Dredged or excavated spoils shall not be located in a floodway or harmfully interfere with flood flows. Spoils must be removed from any floodplain regulated under Part 31, Water Resources Protection, of the NREPA, or otherwise meet the criteria for a Minor Permit under that part.
     c) The pushout shall not be constructed within or physically touching an inland lake or stream.
     d) The area impacted by pushout(s) shall not exceed 0.5 acre, with the exception of certain farmed wetlands and wetlands degraded by invasive species as described below.
     e) All excavated spoils including organic and inorganic soils, vegetation and debris shall be placed at an upland site, leveled and stabilized with sod, or

seeded and mulched in such a manner as not to erode into any water body or wetland, unless this material is used to re-establish microtopography in certain altered wetlands as described below.

The following additional criteria apply only to wetlands that have been farmed within that past five years, or that are dominated by invasive species such as reed canary grass, purple loosestrife, and *Phragmites*:

f) The area impacted by individual pushouts shall not exceed 1.5 acres, and the cumulative impact of pushouts associated with a project shall not exceed 3 acres.

g. Dredged or excavated spoils from the pushout(s) may be placed within wetlands immediately adjacent to the pushout in order to re-establish microtopography, provided that spoil placement area is limited to a maximum of one acre per project, and that the spoil area will continue to meet the definition of a wetland under Part 303 based on expected water depths shown on project plans.

2. Restoration or Enhancement of Altered Wetland Areas.

Projects that serve to negate or minimize the negative impacts of historic efforts to drain, fill, or destroy wetlands. Projects authorized under this subcategory include:

a) Restoration (to the extent possible) of the original or natural wetland hydrology, vegetation, and/or functions of altered wetlands.

b) Enhancement of certain characteristics of a wetland in a manner not consistent with original conditions (e.g. increased hydrology, alteration of vegetation or wetland functions) only in wetlands that have been farmed within the past five years, or that are dominated by invasive species such as reed canary grass, purple loosestrife, and *Phragmites*.

This subcategory does not include conversion of unaltered wetlands to another aquatic use, such as the creation of a pond or impoundment, the alteration of a wetland identified as a rare or unique ecological type, or the conversion of forested wetlands to another habitat type.

Specific wetland restoration and enhancement activities that may be authorized under this subcategory include:

(i) Installation and maintenance of small water control structures, dikes, berms, and embankments.
(ii) Removal or blocking of existing drainage structures (e.g., ditch plugs, tile breaks, pump removal).\
(iii) Use of soil cultivation equipment, such as harrows, discs, and plows, to re-establish microtopography in wetlands that have been farmed within the past five years, or that are dominated by invasive species such as reed canary grass, purple loosestrife, and *Phragmites*.
(iv) Excavation of accumulated sediment or fill to the original hydric soil surface.

Wetland fill for dikes, berms, embankments, and other structures shall not exceed two acres. The purpose of such fill shall be to restore the original hydrological function of the altered wetland. The two acre size limit refers only to the wetland area on which fill is placed and not to the broader disturbance area or restored basin size.

The following activities cannot be authorized under this subcategory, and require individual permits:

a) Construction of a dike, berm, or embankment that is six feet or more in height and that impounds an area of five acres or more during a design flood; such activity requires authorization under Part 315, Dam Safety, of the NREPA.
b) Any encroachment of a floodplain, floodway, or stream channel that drains over two square miles except for those activities meeting the minor project categories listed in Part 31.
c) Any alteration of a lake or stream requiring approval under Part 301, Inland Lakes and Streams, of the NREPA, except those activities meeting minor project categories listed in the Administrative Rules for Part 301.
d) Any alteration of Great Lakes submerged bottomlands requiring approval under Part 325, Submerged Lands, of the NREPA, except those activities meeting the minor project categories listed in Part 325.
e) Projects that require a permit under Part 323, Shorelands Protection and Management, of the NREPA.
f) Projects that require a permit under Part 353, Sand Dune Protection and Management, of the NREPA.

V) Removal of Man-Made Structures

- Physical removal of small man-made structures from wetlands, not including houses or commercial buildings, provided that the following conditions can be met:
  1. The structure to be removed does not control the water level of an inland lake or stream, or the water level in the adjacent wetland.
  2. All material removed from the wetland, including footings and pilings, must be removed from the wetland and be disposed of properly in an upland location, or a landfill as appropriate.
  3. Any bare soil or disturbed areas shall be promptly stabilized to prevent erosion.
  4. The wetland must be restored to its original condition or to a condition that is consistent with the surrounding wetland area. Where plantings are required, native Michigan plants must be used.
  5. This GP category *does not* authorize more than de minimus excavation of soil and sediment or the use of water jetting to remove structures in wetlands.

Determination of whether an application may be processed under these GP Categories will be made by DEQ staff.
Issuance of a permit pursuant to GP procedures does not remove the need for other applicable local, State, or Federal permits.
This GP modifies and replaces the June 14, 2002 *General Permit Categories for Minor Activities in Wetlands in the State of Michigan* and shall expire five years from the date of issuance on June 13, 2012, unless revoked or modified before that date.

APPENDIX D

State Authority, Federal Authority, Privacy Act Statement, State and Federal Penalties

STATE AUTHORITY

This application can be used for the following Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

1. Part 301, Inland Lakes and Streams, of the NREPA

A permit is required to:

- Dredge or fill bottomlands.
- Construct, enlarge, extend, remove, or place a *structure* on bottomland.
- Erect, maintain, or operate a marina.
- Create, enlarge, or diminish an inland lake or stream.
- Structurally interfere with the natural flow of an inland lake or stream.
- Construct, dredge, commence, extend, or enlarge an artificial canal, channel, ditch, lagoon, pond, lake, or similar waterway where the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high water mark of an existing inland lake or stream.
- Connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or wetland with an existing inland lake or stream for navigation or any other purpose.

2. Part 303, Wetlands Protection, of the NREPA

The following activities are prohibited in wetlands unless a permit has been obtained from the MDEQ:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain surface water from a wetland.

Regulated wetlands are defined in Part 303 and the associated administrative rules.

3. Part 325, Great Lakes Submerged Lands, of the NREPA

A permit is required for all filling, dredging, and placement of permanent structures (i.e., groins, docks, piers, pilings, etc.) below the "ordinary high water mark" and on all upland channels extending landward of the "ordinary high water mark" of the Great Lakes.

4. *Floodplain* Regulatory Authority found in Part 31, Water Resources Protection, of the NREPA

A permit is required for any occupation, construction, filling, or grade change within the 100-year floodplain of a river, stream, drain, or inland lake. Bridges and culverts are considered an occupation of the floodplain, as are activities that involve storage of materials in the floodplain.

5. Part 353, Sand Dune Protection and Management, of the NREPA

A permit is required for all proposed new uses in designated critical dune areas mapped in the “Atlas of Critical Dune Areas” prepared by the MDEQ. The following counties have designated critical dune areas:

Alger	Berrien	Emmet	Luce	Mason	Ottawa
Allegan	Charlevoix	Keweenaw	Mackinac	Muskegon	Schoolcraft
Antrim	Chippewa	Leelanau	Manistee	Oceana	Van Buren
Benzie					

Islands that have designated critical dune areas include Beaver Island, North Fox Island, South Fox Island, High Island, North Manitou Island, and South Manitou Island.

6. Part 323, Shorelands Protection and Management, of the NREPA

Designated Environmental Areas - A permit is required for any of the following activities in a designated environmental area:

- Dredging, filling, grading, or other alterations of the soil.
- Alteration of natural drainage, but not including the reasonable care and maintenance of established drainage.
- Alteration of vegetation utilized for the preservation and maintenance of fish or wildlife, including identified colonial bird nesting areas.
- Placement of permanent structures.
- Farming of land is allowed without a permit if the person is engaged in the business of farming and the land is used for the production and harvesting of agricultural products using normal farming implements and generally accepted agricultural practices and if artificial draining, diking, dredging, or filling are not used and the natural contour of the land is not altered.

The following counties have designated environmental areas:

Alcona	Arenac	Charlevoix	Delta	Huron	Monroe
Alger	Baraga	Cheboygan	Emmet	Mackinac	Tuscola
Alpena	Bay	Chippewa	Houghton	Marquette	Wayne

Designated High Risk Erosion Areas - A permit is required for the erection, installation, or moving of a permanent structure on a parcel of land where any portion is a designated high risk erosion area. Examples include homes, porches, septic systems, additions, substantial improvements of existing structures, and out buildings. The current counties with high risk erosion areas include:

Alger	Bay	Emmet	Keweenaw	Mason	Presque Isle
Allegan	Benzie	Gogebic	Leelanau	Menominee	St. Clair
Alpena	Berrien	Grand Traverse	Luce	Muskegon	Sanilac
Antrim	Cheboygan	Houghton	Mackinac	Oceana	Schoolcraft
Arenac	Chippewa	Huron	Manistee	Ontonagon	Van Buren
Baraga	Delta	Iosco	Marquette	Ottawa	

NOTE: These brief summaries are only intended to provide assistance in determining whether this application is appropriate for your proposed project. They should not be construed as a complete description of the statutes or as a limitation of the state or federal government's regulatory authority.

STATE AUTHORITY (con't)

7. Part 315, Dam Safety, of the NREPA
Permits are required for dams with a dam "height" of six feet or more and that have a surface area of five acres or more at the design flood elevation. A permit is required for new dam construction, enlargement of an existing dam or impoundment, dam repair, dam alteration, dam removal, dam abandonment, or reconstruction of a failed dam. A licensed professional engineer must prepare, sign, and seal the construction plans, except for minor projects as defined in Part 315, or for projects by non-profit organizations under certain circumstances, as specified in Part 315. A Part 315 permit is not required for dam "maintenance"; however other permits may be required.

A permit application for **Part 91, Soil Erosion and Sedimentation Control, of the NREPA** is available from local units of government for all earth change activities which disturb one or more acres of land, or if the earth change is within 500 feet of a lake or stream. Generally, permits are issued locally unless multiple counties are involved. State permits seldom apply.

FEDERAL AUTHORITY

The U.S. Army Corps of Engineers (USACE) has been regulating activities in the nation's waters since 1890. Until the 1960's, the primary purpose of the regulatory program was to protect navigation. Since then, as a result of laws and court decisions, the program has been broadened so that it now considers the full public interest for both the protection and utilization of water resources.

The regulatory authorities and responsibilities of the USACE are based on the following federal laws:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the obstruction or alteration of navigable waters of the United States without a permit from the USACE.

- Section 404 of the Clean Water Act (33 U.S.C. 1344) prohibits the discharge of dredged or fill material into all waters of the United States, including wetlands, both adjacent and isolated, without a permit. The state of Michigan has assumed from the U.S. Environmental Protection Agency (USEPA), the authority to regulate the placement of fill material in waterways and wetlands under provisions of Section 404 g (1) of the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.). However, since Section 10 of the Rivers and Harbors Act does not provide for similar transfer to states, the USACE retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and their adjacent wetlands. The discharge of any fill materials must comply with state water quality standards consistent with Sections 301, 307, and 401 of the Clean Water Act.

PRIVACY ACT STATEMENT

Title of Form: "Joint Permit Application" (EQP 2731) from the Land and Water Management Division (LWMD), Michigan Department of Environmental Quality (MDEQ), and the USACE.

1. AUTHORITY: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act of 1977.
2. PRINCIPAL PURPOSE(S): These laws require permits authorizing activities in or affecting navigable waters of the United States and the discharge of dredged or fill materials into waters of the United States.
3. ROUTINE USES: Information provided on this form will be used in evaluating the permit application.
4. DISCLOSURE: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

If a completed application is made to the Detroit District Office of the USACE, a copy will be furnished to the MDEQ's LWMD. Conversely, if a completed application that is within the USACE's jurisdiction is submitted to the MDEQ's LWMD, a copy will be furnished to the Detroit District Office of the USACE, and subsequently the content is made a matter of public record through issuance of a public notice.

STATE AND FEDERAL PENALTIES

Section 3011.2 (5) of Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, provides: "A person who knowingly makes a false statement, representation, or certification in an application for a permit or in a notice or report required by a permit, or a person who knowingly renders inaccurate any monitoring device or method required to be maintained by a permit, is guilty of a misdemeanor, punishable by a fine of not more than $10,000 per day for each day of violation."

18 U.S.C. Section 1001 provides that: "Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations, or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both."

NOTE: These brief summaries are only intended to provide assistance in determining whether this application is appropriate for your proposed project. They should not be construed as a complete description of the statutes or as a limitation of the state or federal government's regulatory authority.

APPENDIX E

Glossary

For additional definitions, please refer to the associated statutes and rules. The generalized definitions below are only provided to assist in the completion of the Joint Permit Application. They are not intended as a full legal definition of these terms. Many of these terms are defined by statute or rule and these sources and any applicable case law should be consulted for a complete definition.

Adjacent and Impacted Property Owners	Those properties which physically touch the applicant's property, also including all properties which may be impacted by the proposed activity. May include all property owners on a lake, may also include upstream and downstream property owners on a stream depending on whether the proposed activity is likely to impact their properties.
Boat Hoist	Mechanism or apparatus used to raise a boat out of the water.
Boat Well	An artificial embayment for boat moorage created by excavation/dredging into the bank of the waterway, usually including bank stabilization within the embayment.
Breakwater	A structure that protects a shore area, harbor, or basin from the full impact of waves.
Bulkhead	A vertical or near-vertical wall primarily designed to prevent erosion and other damage due to wave or ice action.
Coastal Zone Management Program	"Consistent with Michigan's federally approved Coastal Management Program" means that the project complies with the standards set forth in the Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), that regulate activities in coastal areas. Federally permitted or funded projects that have the potential to adversely affect coastal resources are required to be consistent with Michigan's environmental protection statutes.
Critical Dune Area	A geographic area designated in the "Atlas of Critical Dune Areas," dated February 1989, which was prepared by the department.
Cross-section	Side view (elevation view) of project site.
Dam	An artificial barrier, including dikes, embankments, control structures, spillways, and appurtenant works, that impounds, diverts, or is designed to impound or divert water, or a combination of water and any other liquid or material in the water. The definition of a dam does not include a storage or processing tank or standpipe constructed of steel or concrete, a roadway embankment not designed to impound water, or a dug pond where there is no impoundment of water or waste materials containing water at levels above adjacent natural grade levels.
Dam Abandonment	An affirmative act on the part of an owner to discontinue maintenance or operation of a dam.
Dam Alteration	Changes in the design of an existing dam that directly affect, or may directly affect, the structural integrity or operation of a dam.
Dam "Height"	Difference in elevation measured vertically between the natural bed of a stream at the downstream toe of the dam, or, if it is not across a stream channel, from the lowest elevation of the downstream toe of the dam to the design flood elevation or to the lowest point of the top of the dam, whichever is less.
Dam Maintenance	The upkeep of a dam and its appurtenant works but does not include alterations or repairs.
Dam Repair	To substantially restore a dam to its original condition and includes only such restoration as may directly affect the structural integrity of the dam.
Department	Michigan Department of Environmental Quality (MDEQ).
Dock	A small structure constructed over water on pilings to gain access to a boat or for recreational purposes such as fishing.
Earth Change	A human-made change in the natural cover or topography of land, including cut and fill activities, which may result in or contribute to soil erosion or sedimentation of the waters of the state. Earth change does not include the practice of plowing and tilling soil for the purpose of crop production.
Encroachment	Any structure, filling, grading, or deposition of materials in, upon, across, or projecting into a wetland, floodplain, channel, floodway, lake, or stream.
Environmental Area	An area of the shoreland determined by the department on the basis of studies and surveys to be necessary for the preservation and maintenance of fish and wildlife, as defined in Part 323 of the NREPA.
Erosion Hazard Line	The line along the shoreland that is the landward edge of the zone of active erosion. This line is where the 583.0 foot contour on Lake Michigan, the 582.2 foot contour on Lake Huron, or the 603.3 foot contour on Lake Superior meets the shoreland, whichever is farthest landward (International Great Lakes Datum [IGLD], 1955).
Failed Dam	A dam not capable of impounding water at its intended level due to a structural deficiency.
Filter Fabric	Commercial geo-textile fabric used for soil stabilization.
Floodplain	That area of land adjoining a river, stream, drain, or inland lake, which will be inundated by a 100-year flood.
Floodway	The channel of a river or stream and the portions of the floodplain adjoining the channel that are reasonably required to carry and discharge the 100-year flood and which must be kept free of *encroachment* so that the 100-year flood can be carried without a harmful increase in flood heights.
Flume Method	A method of placing utilities across a stream or lake which blocks off a portion of the waterbody such that the work can be done "in the dry."
Groin / Jetty	A structure placed perpendicular to the shore and extending out into the water. Used either singularly or in a series to trap and accumulate sand on the updrift side of the groin.
Harmful Interference	Causing an increased stage or change in direction of flow of a river or stream that causes, or is likely to cause, damage to property, a threat to life, a threat to personal injury or pollution, impairment, or destruction of water or other natural resources.
High Risk Erosion Area	A shoreland area determined by the department to be subject to erosion and which has an average annual recession rate of one foot per year or more.
IGLD85	International Great Lakes Datum of 1985.
Impoundment	Part 301 - The water held back by a dam, dike, floodgate, or other barrier.
Inland Lake or Stream	Part 301 - A natural or artificial lake, pond, or impoundment; a river, stream, or creek which may or may not be serving as a drain as defined by the drain code of 1956, Act No. 40 of the Public Acts of 1956, being sections 280.1 to 280.630 of the Michigan Compiled Laws; or any other body of water that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water, including the St. Marys, St. Clair, and Detroit rivers. Inland lake or stream does not include the Great Lakes, Lake St. Clair, or a lake or pond that has a surface area of less than 5 acres.
Low Sand Trap Wall	A structure parallel to the shoreline with a height approximating the water elevation, with the purpose of trapping sand between the wall and a bulkhead, which are within 30 feet of each other.
Marina	A public or private facility which extends into or over an inland lake, Great Lake, or stream that offers docking, loading, or other servicing of recreational vessels to the public or members of the marina.

Glossary (con't)

For additional definitions, please refer to the associated statutes and rules. The generalized definitions below are only provided to assist in the completion of the Joint Permit Application. They are not intended as a full legal definition of these terms. Many of these terms are defined by statute or rule and these sources and any applicable case law should be consulted for a complete definition.

Marine Railway	A structure for launching boats consisting of two or more parallel rails extending from shore to deeper water, the hardware upon which the rails are mounted, and a boat carrying a cradle device that glides over the rails.
Natural River	A river which has been designated by the Natural Resources Commission for inclusion in the wild, scenic, and recreational rivers system, under Part 305 of the NREPA.
National Flood Insurance Program	"Consistent with the National Flood Insurance Program" means that the project complies with the standards set forth in 44 CFR 60.3 that regulates activities in Special Flood Hazard Areas as delineated on Flood Insurance Rate Maps and Flood Hazard Boundary Maps published by the Federal Emergency Management Agency (FEMA).
NGVD29	National Geodetic Vertical Datum of 1929.
Navigable Waters of the United States	As defined by the USACE - Those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water body to the 0rdinary High Water Mark. A list of such waters in Michigan is available from the Corps of Engineers' office in Detroit. They generally include all Great Lakes and connecting channels, waterways constructed or improved for navigation by the Corps, major rivers to heads of navigation, and segments of waterbodies whose surface elevations are subject to backwater influence (below the Ordinary High Water mark) of adjoining listed navigable waters of the United States. In Michigan navigability is defined by the court system.
100-Year Floodplain	The floodplain that is inundated by a flood with a magnitude that has a 1 percent chance of being equaled or exceeded in any given year.
Ordinary High Water Mark (OHWM)	As defined by the USACE - The line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. The USACE's definition of OHWM differs from the state's on Great Lakes shorelines. For the state definition please refer to the applicable state statutes and rules. It is recommended you consult both agencies if the location of the OHWM is an important factor in your permit application
Pier	A structure extending outward from a shore, over water that is used to secure, protect, and provide access to ships or boats.
Pilings	Beams or posts of timber, concrete, or steel driven into the bottomland or wetland as a means of securing a boat or supporting a pier, boardwalk, dock, or other structure.
Plan View	Top or bird's-eye view of a project site.
Plow Method	A method of placing underground utilities which involves the digging of a trench, placement of the utility, and immediate burying in one continuous operation.
Revetment	An orderly facing of stone or broken concrete along a slope to prevent erosion.
Riprap	A layer, facing, or protective mound of stone of varying sized pieces randomly placed to prevent erosion, scour, or sloughing of an embankment or structure.
Rise	For bridges: distance from the stream bottom to the underside of the bridge deck. For culverts: distance from culvert crown to the stream bottom or lowest point of culvert (whichever is higher).
Seasonal Structure	A structure, such as a dock, boat hoist, ramp, raft, or other recreational structure, that is placed on or across bottomland and is not permanent because it is placed in the spring and removed in the fall.
Seawall	A bulkhead or other permanent revetment structure that fulfills an identifiable need for erosion protection or bank stabilization for the protection of or improvements on uplands.
Section 10 Waters	The Great Lakes and their connecting channels and other navigable waters regulated not only by the department but also by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act of 1899.
Setback	In designated high risk erosion areas, the minimum distance a permanent structure can be constructed from the erosion hazard line without a special exception.
Shoreline	Existing edge of water at the time of application, which may change over time.
Slope	A ratio of the change in the horizontal direction compared to that in the vertical direction of an inclined surface (horizontal/vertical).
Soil Erosion and Sedimentation Control Measures	Temporary and permanent devices that are installed or constructed and/or establishment of vegetation to minimize the movement of sediment off-site during and after construction.
Spillway	An overflow device, in or about a dam or other hydraulic structure, designed for the discharge of water from an impoundment.
Stormwater Detention Basin	A basin, either dry or wet, that temporarily captures and stores stormwater runoff before discharging to a surface waterbody.
Stormwater Retention Basin	A basin which captures stormwater runoff with no direct discharge to a surface waterbody. The runoff either infiltrates or evaporates.
Structure	The term structure shall include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other obstacle or obstruction. The department includes other examples e.g., a marina, dam, stream deflector, groin, sewer, pipeline, cable, culvert, bridge, home, porch, garage, additions, out buildings, septic systems, and commercial buildings.
Underspill	A device used to release water from the lower part of an impoundment rather than from the upper part.
Upland	The land area which lies above the ordinary high water mark and is not wetland or floodplain.
Waterway Opening	That area available for carrying water through a bridge or culvert structure.
Wetland Assessment	Refers to the evaluation of a site by the department, at the request of a property owner or his/her agent, for purposes of providing information regarding the presence of wetlands on the site.